

### EDITORS



James Slocock MArch Year 1



**Alex Valakh** MArch Year 1 atelier qedCLASS OF 2012/2013GROUP COMPETITIONSMArch YEAR 1MArch YEAR 2CUBACYPRUSMSA CROSSINGSQED FRIDAY CAKE RECIPES



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# atelier ged

We gratefully acknowledge the valuable contribution made by collaborators this year...

Fielden Clegg Bradley Studios (Richard Priest, Tom Jarman) Foster + Partners (Mark Atkinson) Grimshaw Architects (Eduard Ross, Tanya Dee) Sheppard Robson (Alex Solk, Jimi Estevez and James Jones) SOBE (Prof. Arto Kiviniemi, Dr. Tuba Kocaturk) Markella Menikou and Adonis Kleanthous (University of Nicosia) lan McHugh (Green Triangle) Jodi McLeod (Michael Hyde and Partners) Jonathan Fovargue (Eurban) Corinna Gage (atelier ten) Dr. Chris Bryan (Environment and Sustainability Institute, University of Exeter) Dirk Krolikowski (Rogers Stirk Harbour) Dr. Danny Richards (MMU) Patrick Drewello (Amanda Levete Associates)

#### msa atelier staff



Colin Puał



Siobhan Barry



Dominic Sagar

MArch Year 1





### CLASS OF 2012/2013

#### MArch Year 2



# GROUP COMPETITIONS



Innatur\_2isanopenideas competition that seeks innovative, cutting-edge and contemporary proposals, committed to a strategy of implementing architecture in a protected natural environment. Approaches had to point toward finding synergies between nature and the building itself.

Participants were invited to find spaces that promoted a deep understanding and assimilation of nature. Projects had to lead through their architecture to sensitivity, awareness, understanding, enthusiasm and commitment to the natural environment around them.

The brief asked for the design of a nature interpretation centre, which would enhance, motivate, conserve and research its natural environment in the attempt to create a better public awareness and understanding of its environment.

Each team defined their chosen locations for the project. Exploring natural environments and natural threat landscapes.

http://www.opengap.net/index.php?idioma=2

# innatur\_2

### Nature Interpretation Centre

### DIADEM DEAD SEA

#### Sandy Birdi, Zuben Markanday, Georgina Rose Walker, Christian Wren

#diademdeadsea is an interpretation centre like no other, promoting the conservation of one of the most unique environments on Earth, the Dead Sea. At 423m below sea level, its shores are the lowest land point on earth, and its high salinity has made it a popular tourist destination. However, in what would be an economic, environmental and cultural disaster, the Dead Sea is dying, slowly sinking due to human industrial and agricultural activity.

#diademdeadsea sits on the edge of the Wadi Mujib Biosphere Reserve on the Jordanian shore of the Dead Sea. Intrinsically linked to the composition and transition of the sea in form, function and aesthetic, as the Dead Sea changes so does #diademdeadsea. Sea water is fed through panels of Blackthorn brushwood that are grown on site, depositing salt and minerals that are later harvested. Run off water drips into the cavern like spaces where users can bathe in shade and in the unique saline microclimate. As the sea level decreases, water is left in stepped pockets (see section), maintaining a physical link to the sinking sea, and allowing visitors to continue to bathe under the structure. #diademdeadsea does not aim to replenish the Dead Sea, but to allow visitors to experience and understand its changing nature.



## POST-MINING: BUTTE, USA

Lorcan O'Connor, Zoe Hobson, James Slocock & Richard Jefferis

"The water is oxblood red at the surface, stained by manganese and iron; deeper down, heavy copper compounds turn it the color of limeade. It will burn your eyes, stain your clothes, and desiccate your skin. If you drink it, it will corrode your gullet before it poisons you... ... there's nothing — just a toxic teardrop in the middle of a Montana wasteland."

Our project turns this toxic material from the historic mine into fuel for ecosystems using experimental chemical processes. Working with the University of Exeter and consultants from Butte, we propose a network of bio-remediation towers which stem from a visitor centre that forges a new relationship between a town and it's natural context. The old mine shafts provide a platform for geothermal energy production which drives the process.

Whilst the towers focus on the science, 'The Shaft' centre is designed to engage the visitor with the extreme geography and history of the site. Through an explorative and interactive journey, presenting innovative future mining processes alongside an abstract representation of Butte's mining heritage, we showcase how scientific process and landscape evolution can become united.





### CHERNOBYL ARKs

Daniel O'Hara, Beki Bayliss, Alexandr Valakh, Vince Chen, Warren Lampson Suen

'I would like a reserve to be created here, ideally it would have great protection for the nature and for there to be research teams, a scientific base...That is my dream. I can only express my hope...'

Sergey Gaschak- Deputy Director of International Radioecology Laboratory, Ukrain and former Chernobyl disaster liquidator.

Located in the heart of the abandoned city of Pripyat, Ukraine, the interpretation centre acts as a biological archive capable of recording the ecological evolution of its unique context. An innovative bacteria cell array within the sunken mega-structure is used to store DNA data of flora and fauna species whilst simultaneously serving as pixels to display the narrative of the site as an exhibition to visitors. A network of research 'machines' across the landscape further inform the creative learning environment of the centre. Its spatial quality echoes the narrative of the site as a memorial to the victims of the disaster and serves to strengthen the emotive experience of engaging with has gone before whilst looking to the future. Indeed, in acting as a new paradigm for responding to future potential disasters in nuclear power within a global context, the importance of understanding and interpreting this environment and its evolution could not be more poignant or more necessary.



The brief was purposefully vague with the intention of generating creative solutions. The overall objective was to create a vibrant public space that connects the city to the riverfront. Intended to be a public space used by the many diverse citizens of Detroit ranging from inner city workers to suburban families of all race, the brief calls for the creation of something amazing from the existing infrastructure. The people of Detroit deserve and demand imaginative, awe-inspiring, dynamic spaces in their city.

Detroit is a city in need of reinvigoration and this new public space could be a vehicle for healing and getting people excited about the future. In a city of over 143 square miles connections were critical. Physical, visual and emotional connections influence the viability of an area and its ability to attract inhabitants.

Embracing holistic design principals and sustainability was also key to the success of any design solution.

http://www.aiadetroitbydesign2012.com/

### DETROIT by DESIGN **Detroit Riverfront Competition**

## DETROIT **BY DESIGN**

Ben Elford, Claire Hamilton, Danielle Foster, Sophie Heaford

#### Detroit Jukebox offers the following:

-A series of interactive cubes scattered across the site which provide several functions. Their main function is to allow the user to upload and store digital media such as photographs, videos or voice recordings. These interactive cubes intensify the experience of sharing in precious and proud memories by engaging the senses.

-A large public screen for televised events, which doubles as a communication point with Windsor opposite and promotes Detroit's connection beyond the cities boundaries.

-A live website for remote access can also be found at:

#### http://detroitjukebox.tumblr.com

where the experiences people have enjoyed and recorded in and around the city can be found before being shared by the people of Detroit.

-The site also offers an area for people to expel any difficult memories. This is realised in the form of a monthly event in which biodegradable paper lanterns are lit and washed away by the Detroit River.

Each element of the project is intended to encourage a celebration of the resilience of Detroit's inhabitants through active participation with the city.











# **EMOTOWN**

#### Jemie Ejekam, Joanna Hiew, Ompei Maenobo

The city of Detroit is commonly known as the Motor City or the Motown. eMo has something to do with electronics. eMo is also short for emotional because what we're trying to do is construct a feeling. What we're trying to do produce a piece of environmental ambience as much as we're trying to do something which is instrumentally logical. We're trying to make it feel good. Hence the idea of emo or emotional, emotown, emocity.

eMotown is conceived as a urban space in which activities are promoted throughout the incorporation of media art installations, architecture interventions and landscape operations. Transportation becomes an opportunity for both domestic and international connection with neighbouring city of Windsor, Canada.

eMotown is a moment captured in time. The people, the culture and the existing contextual conditions are left to re-adapt and rehabilitate itself.





One such area is Redtory – a former packaging factory complex. It consists of numerous industrial buildings. Recently, "Red Plant" underwent a major revival in response to the occupation of many of its buildings by creative and enthusiastic individuals and organizations, who infused the complex with bars, restaurants, design studios and art galleries. The result is a unique and dynamic enclave for members of the progressive and independent art community.

The aim of the competition was to create a space for young designers and artists. Considering the proposal's range of possible program (creative spaces, design studios, workshops, galleries, design schools, machinery spaces for the industrial arts) the development was to have the capability of providing work space for more than one hundred design students and professionals. The proposal had to consider all areas inside and outside the buildings. Participants were encouraged to reactivate the unique silo, as well as the rooms, rooftops and gardens of the surrounding buildings.

http://homemadedessert.org/silo-2#.UbdMrfmsiVY

# **REVIVAL OF THE SILO**

## BIOLUMINESC **ENT CITY**

Jennifer Yan, Monica Ong, Lorena Chan, Yunitka Shaw

"Bioluminescent City" is a response to the *Revival of the* Silo competition brief, to revitilize and reuse an old silo within an art village in Guangzhou, China. The project uses the silo and the metaphor of fireflies as grounds of tackling Guangzhou's highly polluted skies and the Pearl River. We explore the city's evolvement from traditional industrial city to a cultural city of art and we look far into the future and discover that natural world will be the one that saves itself and the city.

This research-led project imitates the bioluminescence of fireflies as a communication method to reflect the level of pollution, thus glowing different colour to warn people of the city's hazard. The project will become an art work itself, and influences the behaviour of individuals and triggers them to take actions to protect their city. As we move towards a more digital world, the project will also nurture future digital artists that will experience new sustainable way of creating art by harvesting the bioluminescent technology. This will inspire people rethink new ways of living and together we will bring back the fireflies into a clean and healthy city.









The brief of the competition was to design a skyscraper hotel tower and sky garden in a key part of the Manhattanville neighbourhood in New York City. The proposed skyscraper should enhance the area and be a recognizable addition to the New York City skyline. Given programmes include retail, restaurant facilities, offices, hotel tower and sky garden.

The tower must contribute to the local community, utilise the river view and encourage a direct relationship with the street. It must meet the social, economic and environmental conditions of the site in addition to providing a sustainable design approach to the project. The entry overall must act as a landmark building maximising the "development potential of the site" and provide "a visual focal point" onto the prominent corner junction where the space closes.

http://www.superskyscrapers.com/

# HOTEL TOWER & SKY GARDEN

Super Skyscrapers Competition

# **REFUGE-E**

Gin-Yee Luu, Salima Mitha, Meor Naim, Omer Osman

New York Hotel Tower & Sky Garden Competition

At RefugeE, we encourage you to be the controller of your stay. You may help yourself to the herb gardens where you can pick your own ingredients or visit the ground floor market where locally grown fruit and veg are in abundance. Our cooking school welcomes you to lessons on how to produce deliciously nutritious meals. By walking around the market and exchange hub, you will generate enough electricity for the next guest that checks in. This community spirit is a reflection of our envisioned social system so don't be dismayed if you come across a homeless person for they have earned their stay through transporting these goods to and from the hotel via boat, foot & rail.

At RefugeE we employ a yearly cycle of growing food. Research has proven that plants do not require all the colours of the sun's colour spectrum to thrive therefore, pink LED lights will be used to grow fruits and vegetables indoor within the hotel. This is particularly efficient during the winter months when outdoor plant growth is unpredictable. By being environmentally conscious, ecological, socially responsible and economically viable, RefugeE is an exemplar of sustainability.







The bridge itself takes the form of two separate routes. The main span is made up of two decks; a purely pedestrian residential route above and vehicular access and parking on the lower deck. This is intended mainly for the residents of Smichov, Podoli and Life Span. Meanwhile, a very light pedestrian route is provided across the main bridge, connecting the tourist locations of Fort Vysehrad and the filtration plant below. A series of algae filtration units purify a section of the river of leisure activities, the waste from which can be used as fertilizers on the allotments situated on the Emperor's Meadow. The two bridges interact to form a local center of shops, the homeless shelter and a plaza for community events.

The principle aim of the Life Span Bridge is to connect the areas of Smichov and Podoli. Life Span therefore takes measures to not only introduce new housing, but to ensure the involvement of the existing communities in the project.

www.arquitectum.com

# PRAGUE

### Bridge Building across River Vltava

# LIFE SPAN

#### Mohamed Haisham, Nicholas Dunlop, Hannah Dixon, Richard Owst

Prague 2012 | Bridge over river Vltava

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# MArch YEAR ONE

LABS Montserrat is a proposed research facility that provides working laboratories, teaching facilities and accommodation for working scientists, visiting students and eco-tourists. This project was proposed by a scientist [Gage] and an architect [Fenton] after the 1995 soufreire volcano eruption which laid waste to the entire existing capital city and endangering local flora, fauna and species of Montserrat. With the new capital city beginning to emerge, the LABs Montserrat will work to conserve the local species and provide economic assistance to Montserrat through Eco-Tourism.

This is an on-going project by Atelier 10 and the brief for project was to study varying design options that have the capability to expand, adapt and suit the tropical, hurricane prone climate of the island of Montserrat.

Each of the students worked on a separate approach to the brief exploring different options in design potential from the use of local resources, prefabrications, high-tech strategies to cargo-tecture.

# LABS MONTSERRAT

Live Gage & Fenton Project - Research Facility



### MONTSERRAT LOCAL

#### **Richard Jefferis**

The LABS Montserrat project incorporated six distinct design proposals for a bio-diversity research and eco-tourism centre on the Caribbean island of Montserrat. The hill site is adjacent to the redevelopment of their new capital, Little Bay.

This scheme - based on the principles of sourcing local materials and trades makes use of both passive and active design strategies to achieve a modular building programme which is able to respond to different site conditions. Two different sized units are proposed, with a large two-storey centre housing functions such as the reception and restaurant, with the smaller units able to be configured as accommodation or research labs.

The form was derived from extensive wind modelling using live data from the site itself. The roof behaves as a funnel, inducing air extraction through the void between the internal envelope and the outer roof shape. Internal arrangements are flexible to accommodate different functions, including an 'outdoor room' option which exposes the structure, leaving the user to appreciate the beauty of the ocean beyond Little Bay.





1. User Controlled Natural Ventiliation

2. 'Ducted' Micro Wind Turbiner

 Solar Water Heaters with Greywater Recycling

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## MONSTERRAT CONTAINERS

#### Nicholas Dunlop

Monsterrat is a small Island in the Caribbean. The aim of the project was to design Research laboratory to examine the unique environment of the island, to help fund the project, it would include a hotel, scientific tourists.

A Construction system was designed rather than a final product. This was to allow the project to grow , shrink and adapt according to what is needed in the future.

The base building block of the project is the Shipping Container, as the island, due to imports, has a gently building excess of them which are abandoned to rot.

All part of the Construction systems use containers or parts of a container. Through the use of there exciting connectors, every part of the design is entirely adjustable.

Ventilation is achieved via the stack effect. This done by the most outstanding feature of the construction system, is the vent towers, which are made of up right containers , that stand dramatically above the rest of building, giving it an characteristic skyline.









NUMBER OF

MARTINETTE



## MONTSERRAT PASSIVE\_D

#### Mohamed Haisham

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Passive\_D [version 1.0M]'s concept combines the elements of Timber construction with digital fabrication [CAD/CAM] and passive design optimization strategies.





### MArch Y1 MONTSERRAT LABS

#### Warren Lampson Suen

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The whole architecture is divided into sections of circulation modules and functional modules. There are in total three levels. The ground floor, which holds the restaurants and offices, is a public space for both guests and occupants. The Lower Ground Floor 1 is mainly for accomodation, whereas Lower Ground Floor 2 consists mainly of research space.

Circulation modules are placed between functional modules with staircases and elevators, to provide means for occupant to travel up and down the structure. There is also a large light well, which runs through 3 levels to bring more natural light into the building.

In functional modules, there are different rooms that hold diffierent activities. The density of these rooms/functional spaces is arranged according to the need of the programme it holds.

On the Lower Ground Floor 2, there is a large atrium which also provide a large public area, wiith plenty of natural light for occupants to relax and interact with each others.





## MONTSERRAT MOBILE\_LABS

#### Jemie Ejekam

The aim of the project was to design a system of buildings/units, with the Caribbean tropical island of Montserrat as a vehicle/site, which could cater to the demands of residential apartments, as well as laboratory spaces and allow for possible future adaption, expansion or growth overtime dependent on the requirements. These buildings would be prefabricated, self sustaining modular units which could form part of the landscape. These units would be flexible in the sense that they can easily expand or grow in number, and can also be built on different types of topography and in the case of Montserrat, a very slopy site.

The design concept was based on mimicing the behaviour of the lizard found in Tropical environments and how it protects itself from the hot environment by minimizing contact with the hot ground and turning its protected back towards the sun thus shading and cooling its sensitve underbelly.

Several ecological factors were taken into consideration for these modular units such as solar heat gain (being in a tropical environment), ventilation/passive cooling, water recycling, energy use, waste management, hurricane proofing and available local materials and adaptive use overtime.









# HIGH-TECH MEGAMODULE

James Slocock

The High-tech Megamodule is an adaptable sustainable solution for remote research facilities and accommodation. Usable in a variety of situations and environments - from a post war zone, environmental disaster site to remote locations. Its robust prefabricated design incorporates a modified concentrated photovoltaic technology system that utilises a dual axis solar tracking mechanism. The whole system has been designed to require minimum maintenance, being in a remote location. Hurricane proofing was a key requirement of the design. The megamodule is able to completely fold and drop into the purpose dug basement in order to protect its parts from flying debris.



The project was designed on a biomimetic concept, heliotropism (the act of tracking

the sun) and homestasis (a self regulatory system that is able to control its internal environment). In a hot climate such as Montserrat, high internal temperatures poses a threat in controlled spaces such as a lab. The entire megamodule rotates using less than 1% of the energy produced by the CPV. The CPV module serves as a barrier to the sun's heat, casting a constant shadow on the buildings below, allowing for a more manageable internal environment.





Trimo Urban Crash Competition asked for a self sufficient Bike Base, consisting of a maximum of three Trimo modular units. The Units were composed to accommodate the following programs:

- A meeting point for cyclists
- Free wireless Internet
- Charging points for computers and mobile phones - A Café

The brief specified that at least 50% of the facade materials should consist of Trimo products. These were used in an innovative manner to promote their products as well as to demonstrate an understanding of the phenomenon of modular construction and materials.

# TRIMO URBAN CRASH

### Self Sufficient Bike Base

## TRIMO URBAN CRASH

Danielle Foster

The **Trimo Urban Crash Bike Base** is comprised of two 20ft and one 10ft shipping container aligned longitudinally. The scheme offers the following:

-Open ends exposing charging points for electrical bikes -A workshop area, where tools are provided for the user to make basic repairs

-A bespoke seating area where the user may charge batteries, use WiFi, dry their wet clothes and purchase helpful cycling accessories

-A supply of foldable stools for users to take onto the meadow and relax

-Sustainable energy and water

-A bespoke sliding door mechanism as a new use of **Trimo Qbiss One** panels. The interior becomes open plan and the doors act practically as a shelter and sun shade.

The Yellow and Black façade, embossed with the **Trimo** logo, stands out to cyclists and pedestrians, creating an instantly recognisable and memorable installation. The overall design is a practical solution for the site, showcasing Trimo products in a distinctive way. It is fully transportable, logically constructed and could be integrated into any city.







### TRIMO URBAN CRASH

Gin-Yee Luu

Located on a main thoroughfare, the containers bring focus to the ever increasing noise and traffic pollution. The project takes advantage of Ljubljana's noise pollution by capturing airborne sound, converiting it into usable energy and using this energy to power the bike shed. Beyond the idea of energy collection, the amount of energy that is available and used for multimedia purposes, will also be a reflection of any emerging patterns of traffic in and out of the city, thus becoming a site for data collection and projection. This exposes the citizens of the city to raw data that is hoped to influence and change lifestyle habits.

The proposal is seen as a 'sock within a wellington'. That is, the durability of the outer shell behaves as a protective barrier to an inner 'sock' of glazing. The two skins work in sync or independently in reponse to environmental conditions. During the day the outer shell works on a pivot and hinge system to provide fold out furniture. At night, the outer shell is folded in and locked up, thus securing the entire bike storage unit . This flexibility offers users with a range of configurations that are able to meet various different programmes.





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## PIXEL:TRIMO URBAN CRASH

#### Alexandr Valakh

In digital imaging, a pixel, is a physical point in a raster image, or the smallest addressable element in a display device; so it is the smallest controllable element of a picture represented on the screen.

The pixel is a multifunctional Cafe and Bike storage repair stop, designed on an orthogonal grid, with entirely adaptable elements including optional layouts and furniture arrangements. The Pixel like its name sake is in an adaptable social environment designed to to create a new and flexible social public space. The pixel is an adaptable system, it is designed to respond to changes in it's environment with a spatial response. These spatial responses include differing strategies for Daytime, Nighttime as we all as different strategies which can be implemented to respond to environmental/seasonal factors, site conditions as well as security requirements. The formation of the units is altered by their movement vertically, this can be achieved either manually or via motorised jack system. The Pixel module includes a cafe, bike repair area and tools as well as integrated E-bike charging stations. The cafe adaptable space can be reconfigured to suit multiple programmatic needs including community meetings and a cinema. The bike





AFE LATT

PUCCIN

The brief for this competition was to design a Temporal Sustainable Theatre for the 2013 World Stage Design Festival in Cardiff. The winning entry would be built at The Anthony Hopkins Centre in Cardiff and used during the WSD2013 festival from 5 till 15 September 2013. The theatre had to be built from low resource materials, considering sustainability and environment and be able to seat an audience of 100 to 150.

The theatre would be used for both performances and presentations. Furthermore, entries were required to be designed and built without manufacturing any of the structure, using either existing and readily available building components or alternative sustainable elements. The total cost of the construction of the theatre had to remain within £20,000 in material costs. Finally, entries had to be structurally self supporting and consider ease and speed of construction.

# TEMPORAL SUSTAINABLE THEATRE

World Stage Design 2013

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## TEMPORAL THEATRE

Weibin Chen

#### CONCEPT & STRATEGY

Digital fabrication in architecture is a relatively recent phenomenon, emerging over the last 15 years. Digital technologies, far from simply representing architectural designs have also developed as tools to generate formal ideas. I conceive the ideas and strategies of using material, structure and fabrication as one 'system' :

#### 1. Genotype and Phenotype

Creating a 'system' of material and fabrication, like 'Genotype and Phenotype', Showing sets of parameters to control forms and Accommodating a range of possibilities. 2. Easy Fabrication

Using the cheap, easy-getting and easy-fabricating material to cut down the cost of material within the budget of £20,000, and the time of fabrication within a short time.

#### 3. Cradle to Cradle (Culture Tour)

Holding a 'Cultural Tour' around the centre of Cardiff to reuse the temporal installation with different functions in different places.









### PALLET THEATRE

Lorena Chan

The Pallet Theatre or Pallet Theatr in Welsh is a temporary sustainable theatre for the 10 day World Stage Design Festival 2013, that is to be held in Cardiff. The project demonstrates the use of wooden pallets as a sustainable construction material. Under a budget constraint, the use of pallets for both the interior and exterior, creates a design which is substantially under budget and potentially for free. The pallet industry is extensive around the globe, however pallets are the second main source of wood waste in the UK. The project identifies pallets as a low cost, easily obtainable material and explores its potential for reuse. The design uses pallets as a modular component, creating a effective structural system. Simple construction methods ensures easily dismantling, which is ideal for this short term project. At the end of its use, the building can be dissembled into its components and the pallets can be reused. The project sits in the courtyard of Anthony Hopkins Centre, encouraging sociability and interactivity. The wooden pallet shell explores spatial quailities of light and dark. In the day trickles of daylight animates the space inside, whereas at night the exterior transforms into a glowing lantern. The theatre not only provides a space for performaners but becomes a performance within itself.









### THE STRAW THEATRE

#### Zuben Markanday

The Straw Theatre is designed to be a temporary, highly adaptable, small scale pavillion composed entirely out of low resource materials, [straw-bales, scaffolding, plastic scaffold sheeting, wooden palettes and plastic milk crates]. Components are un-modified with the exception of straw-bales treated with black paint (for aesthetic purposes and further protection from weathering).

The construction of the pavillion consists of scaffolding as the main load bearing / structural component, with an external, independent, straw-bale facade wrapped around. The use of straw-bales allows for protection against any external noise and good internal acoustic insulation for performances. Straw-bales are also used for public seating within the theatre. Wooden palettes and plastic milk crates are bound firmly together with heavy duty plastic ties, which provide an elevated level for public seating and a stage for performances respectively.

The modular nature of the materials used within the contruction of the pavillion create a highly flexible and adaptable structure which can be easily manipulated to create spaces that accommodate a variety of functions, such as theatrical performances or formal presnentations.















### THE FOREST THEATRE

Benjamin Elford

Intended for the World Stage Design 2013 Event, The Forest Theatre provides a unique and magical space for performance and presentation by bringing the beauty of the surrounding landscape of Cardiff inside the courtyard of the Anthony Hopkins Centre. An exciting and dynamic internal space has been created by providing high ceilings and intimate raked seating, all enshrouded within a flowing, printed curtain skin. Performers can enjoy having an audience watch intently over them, whilst backstage plenty of room for changeovers and movements during performances is provided, allowing for the space to function as an elegant theatre venue.

The theatre is constructed from readily available components fashioned using a simple structural system with the potential to be adapted very easily if required. These components can be reused and recycled beyond the life of the World Stage Design 2013 event, providing a sustainable temporary venue.











### LITTLE THEATRE

#### Yuni Kartika Shaw

The theatre is located in the courtyard of Anthony Hopkins Centre. The walls of the theatre are made from 4 layers of pallets. As the main material, pallet is chosen because it is cheap, strong, easy to find, and recycleable.

The area and budget provided are limited, hence it is necessary to make the theatre as compact as possible with limited circulation space. Therefore the theatre has only 2 gates on the sides, which function as the entrances for actresses and visitors. Those doors are located between the stage and audience seating for easier actress and visitor accesses. During the performance, the gates will be covered with membranes to indicate the performance has started, so visitors will not interrupt.

Furthermore, due to its location in the middle of the courtyard, the circulation in the courtyard is also important. To avoid from blocking the circulation, the theatre gates are located in line with the two main doors of Anthony Hopkins Centre in the courtyard. Hence, if there is no performance being held, students can just walk pass the theatre for shortcut between the two courtyard doors. Students can also hang out in the theatre; and movies or presentation can be projected to the wall.






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## WAVE THEATRE

Christian Wren

The Wave Theatre is a unique performance venue designed for World Stage Design 2013. Constructed from low resource materials, the temporal theatre will be one of the defining attractions of the festival. The theatre gets it's name from it's visitor-controlled 'Kinetic facade' that gives theatre goers the opportunity to open and close the PVC panels of the facade, perhaps to create a wave pattern, or even to wave at visitors outside. When closed, the panels create complete blackout for performances, and when open, a double layer of bubble wrap dividing the panels and structure allow the theatre to be engulfed by light, whilst creating a unique acoustic setting.

Both visitors and performers at the Wave Theatre are treated to an intimate experience shaped by the compact form of the theatre over it's three levels, with not one of the 114 capacity audience more than six metres from the stage. The core structure is custom built scaffolding and a standard build stair tower, and by using a mix of hired components, reclaimed objects, and recyclable new materials, all elements have a planned use after WSD 2013. The total cost of the theatre is approximated at under £7,500, and hopefully demonstrates the potential of low budget, but engaging temporary architecture.







## THE TRI THEATRE

Omer Osman

The Tri Theatre is a dynamic and flexible theatre with a striking form that interacts playfully with the courtyard of the Anthony Hopkins Centre (AHC). The theatre cleverly incorporates simple mechanisms to enable it to interact and respond to different events that may take place in it during the Workd Stage Design Festival.

The main structure will be constructed of simple scaffolding and fabric will be weaved through the scaffold poles both inside and outside the theatre, creating a continuous surface with perforations that allow the penetration of light hence, enabling the use of light as a material that generates different moods within te different parts of the theatre. Rope will be tied betwene the four corners of the overall scaffolding structure and tied around the highest point of the AHC and then draped with the tent of sail fabric in order to provide suitable shelter from external elements. This results in an unsymmetrical tent like structure that adds to the dynamic of the site while maintaining a friendly connection with the AHC building.







# SALUTATION PROJECT

Benjamin Elford, Christian Wren, Lorena Chan, Omer Osman, Tika Shaw, Vince Chen, Zuben Markanday

Atelier ged students engaged in a live collaboration with a variety of key stakeholders in the development of `The Salutation' a well loved public house adjacent to the new Manchester School of Art building and the proposed students union building for MMU (both designed by ged collaborators Fielden Clegg Bradley Studios). Analysis of the building and adjacent public space within the university plan for public the realm was presented at a series of consultation meetings with vice chancellor John Brookes, other key figures in the university and representatives from the students union. A final report was produced documenting the analysis and illustrating the potential for the space to contribute positively to the culture of both the institution and the larger city. The experience provided a valuable opportunity for students to demonstrate their abilities in initiating, developing and reflecting on a consultation process that formed an excellent foundation for a career in architecture. The project was presented persuasively and professionally via a website and final report that will now become a point of reference for the university to develop its estate and brief consultants engaged to deliver the actual work.





78 MArch Y1

Embedded Computation Responsive Prototype

# RESPONSIVE MASHRABIYA



## RESPONSIVE MASHRABIYA

Alexandr Valakh

A solar responsive dynamic shading screen in the form of a 'Mashrabiya' acts as a secondary skin and controls solar glare whilst optimizing the use of natural light internally. Is capable of reducing the cooling load of a structure it is applied to buy 20 percent, with commensurate savings on energy consumption and carbon emissions. This modern representation of mashrabiya pattern turns into dynamic pattern via embedded computation, as it responds to climatic conditions: at various degrees of openness, they take on different geometric patterns from tessellating hexagons to spaced out three-pointed stars.

Advantages of the responsive dynamic shading screen

- Reduced glare
- Less tinted glass/improved daylight penetration
- Less frequent use of internal blinds
- Less reliance on artificial lighting
- Improved views for occupants of the building Energy Consumption:
- Over 50% reduction in solar gain
- Significant reduction in electrical energy consumption.







## MArch YEAR TWO

## **PROJECT DESCRIPTION**

The city of Tianjin, China is rapidly becoming a very sought-after tourist destination and the government is investing in the construction of new airports to open up all regions of the country and to improve both communications and trade. The new terminal was to be built on the site of 6.5 million m<sup>2</sup> currently occupied by the Tianjin Tanggu Airport, a small airport coastline.

The terminal was to meet the following basic features:

- 20 gates.
- 2 tracks landing / takeoff should be oriented 360 EST, dim. 3,600 mt x 45 mt.
- Parking area with 2,000 covered parking spaces and 5000 uncovered.
- Commercial area.

The brief sought for a new air terminal that could increase the reception capacity of the old airport. The design process had to be observed especially by climatic and environmental aspects of the area to explore issues related to sustainability and reducing the environmental impact of such works.

# TIANJIN INTERNATIONAL AIRPORT DESIGN COMPETITION

AWR (Architecture Workshop in Rome)

## 'YANTIAN' AIRPORT 盐'天'机场

Huey Wen, ONG

86 MArch Y2

This research-led project utilises Tianjin International Airport Ideas Competition to apply the agenda of QED. Tianjin is a metropolis in northern China. With its location surrounded by Bohai Gulf and The Haihe River, "water" becomes the main influence in Tianjin's culture. The change in the coastal line has given the opportunity to ancient Tianjin to grow into a village of salt harvesting and waterway transportation, which later became the main financial income for the city. The new terminal will be built on the site comprised mainly salt ponds, barren land and polluted water-bodies. Without a new agricultural use, the region is heading towards an uncertain future. Therefore, the proposed idea of algae cultivation forms the second component in the existing production chain. With the restoration of the former salt pond as an algae cultivation land, the reductive landscape serves as: energy production to the airport, research and good health of the region. This proposal promotes symbiosis between salt field, marine algae cultivation and aviation industry. The aim of the scheme is to be in harmony with its surroundings and make reference to the history of the place - the salt and the sea.









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#### 88 MArch Y2

## INT. AIRPORT TIANJIN

Daniel O'Hara

The proposed new international terminal at Tianjin, China offers a new paradigm for the ecological model of the airport typology. It acts as a global gateway to the region and the sustainable agenda for future development that is currently articulated by the flagship eco-city project.

Inspiration for the design concept is derived from the process of desalination for salt production that defines the geometry of the project site. This is placed in the context of the challenges facing Tianjin and the wider region through climate change defined by a paradox of rising sea levels and a scarcity of fresh water for consumption and agricultural use. The terminal building employs an innovative structural system of 'tubes' that facilitate the environmental strategy for the building to lower operational costs and achieve a self-sufficient ecology of desalinated water, salt products and hydroponic food cultures. The technological integration of a sustainable ecology within the building provides a unique experience for the international passenger and makes manifest the ethos that underpins Tianjin's response to global crises.







## GENERIC AIRPORT

#### Ompei Maenobo

The aviation industry is still growing at a significant rate offering opportunity for commerce, trade and employment. In China, the government plans to build more than 250 airports within the next ten years. However, the future of the industry remains vulnerable to various external threats which could leave their newly built airports to be abandoned as soon as they are built.

There is a clear need for airports for the uncertain future, architecture that has flexibility to adapt, expand and even to shrink in relation to the condition of the industry, global and regional economy, and new environmental pressures. The proposed modular design have the inbuilt flexibility, allowing it to become just like a 'city' that is always in state of flux, and new functions can be easily added without causing any disturbance both inside and outside.





## 92 MARCH Y2 FLOATING FIELDS

Joanna Hiew

Airports has long been associated to non-places. They are not concerned with identity and they do not relate to the people who use the building or to the surroundings. Can an airport be not only a point of transition from the one place to another, but be part of an eventful travelling experience?

Floating Flelds results in an internal setting of a field of reeds as a structural and architectural concept. A framework of these 'reed-like' columns that support the steel girders which carries the roof frame stands on the ground floor with departing passengers circulating on the upper floors, giving them a sense of floating above the fields.

"Airports are gateways to a country or region, and as such why should they not reflect the local culture, surroundings, and materials?"

> Steve Thomas- Emberson, Author of Airport Interiors







## TIANJIN OPENAIR

#### Lorcan O'Connor

The *OpenAir* terminal system aims to radically alter the air travel experience, by removing the typical linear procession and bottlenecks that characterise the modern airport. Travellers enter in close proximity to their own gate, and find themselves in an internal landscape of green spaces and retail concourses, punctuated by extruded courtyards tying the engineered lumber roof structure to the ground plane.

The terminal plan is equally divided into repeating modules, each accessed independantly via high speed trams, with spaces and amenities radiating from these entry points. Without the pressure of long travel distances, and through the use of automated security systems at boarding gates, travellers are free to roam the terminal unhindered.

The lumber roof system is designed with ease of (dis)assembly and reconfiguration in mind, which combined with the modular planning system within allows for future expansion or contraction with the addition or removal of modules, each serving four boarding gates.





## AFS = JET FUEL

#### Rebecca Bayliss

Tianjin airport, located in China, turns air and water into jet fuel. Air travel is the world's fastest growing source of greenhouse gases like carbon dioxide, which cause climate change. Globally there are 16,000 commercial jet aircraft operating daily generating more than 600 million tonnes of carbon dioxide (CO2, the world's major greenhouse gas) per year. The aviation industry generates nearly as much CO2 annually as that which is produced by the activities of the 1,032,532,974 people living on the African continent.

With this in mind, one sustainable solution would be to build an airport that, rather than pumping out CO2 from its planes, extracts CO2 out of the air and re-uses it. Oil is basically made from carbon and hydrogen; using revolutionary technology this type of airport will extract CO2 from heavily polluted airspace, such as that over the country of China and take hydrogen out of the water running through the airport to create oil - the basic element of aviation fuel. This idea is called "Air Fuel Synthesis" and is fundamentally the process of turning carbon dioxide and hydrogen in water into a sustainable fuel.





### **PROJECT DESCRIPTION**

The brief for this competition was to design a facility for the fabrication and testing of wind turbines. With the envisagement that the future of wind generation will be in large offshore installations, and the advent of floating turbines, i.e. installations that are constructed more like oil platforms, wind power can be generated in very deep waters, therefore, the turbines must reflect this developing technology and be situated on the coast.

The site chosen was Anglesey, aptly called "energy island", from here the building placed on the site had to contain fabrication hall, for all parts of the turbine – blades, generators, gears and transmission, testing facilities and research and development centre with shipping and construction managed on-site. As well as fabrication hall there were requirements for a visitor centre, offices, accommodation, plant, testing equipment, berths for ships and barges delivering raw materials and transporting finished turbines to their final destination.

http://www.tatasteelconstruction.com/en/news\_and\_events/awards/tata\_steel\_student\_ awards/architectural/

# TATA FABRICATION AND **TEST FACILITY FOR** WIND TURBINES

TATA Architectural Student Design Competition



#### AMLWCH SPINE Offshore Wind Turbine Fabrication Facility

#### SALIMA MITHA

The Amlwch Spine was derived from exploiting the topographic character of the site. Through exploring the relationship of the site with the landscape and analysing the strict divide between industrial infrastructure and the environmental natural landscape, a design solution was created that would use this strategy as a route from the entrance of the site to the sea. Thus creating a public visitor's route.

A special feature of this design process, giving reference to the QED agenda was analysing which parts of the building would stand in fifty years' time, when perhaps wind turbines would no longer be manufactured anymore. Within this project, the fabrication halls would eventually disappear leaving a stretched building form which flows within the topography and meets the coast at the sea, which is what the visitors route is all about- creating a passage and journey for the locals and visitors that arrives at the pier. The location of the fabrication hall sits beside this route and takes its reasoning from gaining maximum natural daylight from the Eastern sun, which also compliments the accommodation where the evening sun enters the workers flats. In utilising the heavy gusts of wind upon the site, the environmental features also include motor controlled solar louvers which appear within the interactive visitors route, which also acts as exhibition space, helping to keep both the passage and fabrication halls ventilated. Building surfaces of Sunguard solar reflective glass allows the building to humbly sit inside the landscape rather than act as an intruder within it. It thus reflects the views of the landscape externally, also allowing those using the route to view out into the landscape. Overall this offshore facility not only sits humbly within its surroundings and creates a route to the sea, but acts as a compliment to the topographical character from which its design is derived from, and stands as a permanent structure which in later years the 'spine' service areas can remain and become residential dwellings for young professionals or even a hotel for tourists thus helping to boost the economy.







## AMLWCH AEOLIAN CENTRE

#### Claire Hamilton

Amlwch Aeolian Centre, situated on Anglesey, also known as "Energy Island", reflects the growing need for renewable resource. This facility for the fabrication and testing of wind turbines meets the requirements of the Tata Steel design competition. The centre mimics the lifecycle of a wind turbine from making to the end of life.

The route through the factory starts with research and development facilities and visitor centre at the beginning, progressing into the factory, which makes all parts of the wind turbine from nacelle to blades. Due to the close proximity to the Irish Sea offshore wind development, the tour passes through, via boat, wind turbines at work. From here the visitor centre reflects the cradle-to-cradle nature of wind turbines in the reduce, reuse and recycle centre.

Visitor entrance
Car parking
Visitor centre
Visitor cafe
R & D
Bioplastic labs
Nacelle fabrication
Tower fabrication
Blade fabrication

Fishing pier
Visitor harbour
Factory harbour
Boat to offshore turbines
Offshore wind turbines
Recycling centre
Sports pitches on roof
Local sports centre
Outdoor test facility





#### $104_{MArch\,Y2}$

### ARCHITECTURAL STUDENT DESIGN COMPETITION 2013

Meor Naim Meor Kamarul Zaman

Offshore wind turbine is set to change our power source. Currently the biggest energy investment in the world, offshore wind turbine is bound to replace electrical energy source in the world.

Aiming at a site North of Wales, small ancient town call Amlwch, the intervention begin for many purpose, Redevelope, rejuvenate and recreate the ancient cooper town. (A name once given to Amlwch).

An offshore wind turbine, consist of 3 main components, The tower, the Blade and the Nacelle. Based on this, the facility scheme was formed.

-2 moveable manufacturing facility, equiped with high pressure hydraulic jacks, same method as the Turbine Installation Vessel (TIV), to held the facility in place. -The main Necelle facility, also housing the Tourist designation area and all entering land supplies, Rail and Road. -Accommodation facility for more then 80 staff designed with a bridge/ship interaction.

-A connecting bridge from the Accommodation to the Main Manufacturing Centre, with offices and cafeteria located inside.

-Sustainable energy and Rainwater collection system.





### **PROJECT DESCRIPTION**

This was an open International Competition hosted by [AC-CA] to generate progressive contemporary design ideas focused on the modern taboo of the architecture of incarceration – The Prison.

The competition asked participants to design a new prison in the Pacific Ocean that investigated a new direction and functionality of incarceration including methods of confinement. It was to include all the facilities a prison may need, with a design that still facilitates human rights within the deemed confinement. The architecture of this new building had to reflect contemporary design tendencies, standing out for its uniqueness as a prison.

It asked for integration of function, structure and design within this ocean environment, as well as employment of sustainable design in all aspects of the proposal. It was to be evaluated on intelligent use of design principles, use of space and organisation, aesthetics, originality and sustainable design.

http://www.ac-ca.org/en/project06

## PACIFIC

#### [AC-CA] New Ocean Platform Prison Competition



## PLATFORM PRISON, HAWAII

#### Alan Richard Whitton Owst

The prison addresses two key themes; pollution and a competition criteria that two types of prisoners share the facilities but at different times. The prison sits atop a 500m slip formed gravity based structure (concrete shaft) to the sea bed, 20km North of Hawaii. Above water, stacked spaces are accessible in a time-controlled manner via an external stair core rotating round the building over a 24 hour period. Simultaneously, 10km plankton drift-netting circumnavigates the prison collecting ocean debris which will be sorted by prisoners on the platform.

The platform is one of twenty such installations, projecting out approximately 400km into the path of the drifting Great Pacific Garbage Patch. The scheme embraces OTEC technology, generating power from a difference in water temperature at the base and head of the structure. A by-product of the OTEC system is the desalination of water. The building also employs a thermal chimney, sucking up cool air via convection currents for ventilation purposes.

A large atrium space surrounding the stacked spaces has a garden area at its base for prisoners to grow their own produce. Cells located in the perimeter wall of the atrium space not only house the prisoners but also include nesting areas to create a protected habitat for local endangered seabirds.







#### 110 MArch Y2

## PAYBACK

#### Zoe Hobson

A prison where the term payback goes far beyond just time served.

Payback proposes a model for a new prison ecology where the prison acts as a Federal Food Bank. Located in the Pacific waters of the San Francisco coast it acts as a catalyst to better the urban condition of the San Francisco Bay districts.

The inmates become a productive workforce in a system that uses excess nutrients in the waters around as an input resource in aquaculture production. This produce is returned to a matrix of Urban Food Deserts that surround the San Francisco Bay - providing 4500 people with access to fresh and nutrient rich food annually per prison built. The use of the excess nutrients prevents hypoxia occuring in the water, saving the marine ecology surrounding the prison.

The state investment into the prison system has a cradle to cradle cycle that renourishes the state it came from - the prison as a civic resource, rather than a drain on the civic resources.







### PROJECT DESCRIPTION

'aspiring to regenerate a dissipating urban manufacturing sector and address the housing needs of New York City'

The brief for this competition was particularly interesting and relevant to the QED agenda. The competition had an emphasis on social sustainability, informed by local ecology. However the competition was not eligible for entry by UK students. As such we had already started researching the project and area, and were reluctant to change for a project with a brief and program that would be less suitable or interesting.

As a group we decided to continue with the 'Timber in the City' brief, and submit the resulting scheme to a number of alternative competitions. It is intended that this will inform and structure both the design and research processes. After this point we took our schemes and developed them in different directions to form our individual thesis projects.

## TIMBER IN THE CITY **Urban Habitats Competition**

#### **114** MArch Y2

## BOTANICAL BROOKLYN

21/2

GROW

SELL

Sandy Birdi

Botanical Brooklyn is a demonstration facility on the waterfront of Red Hook. The disaster of Hurricane Sandy brought to light the lack of food in the area. Botanical Brooklyn helps the locals and surrounding areas to grow food with limited water and limited land. This is done so via hydroponics.

The main building concept is GROW.SELL.COOK.EAT. The lower ground floor provides facilities for a vegetable market space and a more private fish market. The first floor is predominately a cookery school with facilities such as lecture theatres, class rooms, changing rooms, a hydroponics room and kitchens. The tower, also know and "The Turret" situated at the far end of the building is home to 3 different restaurants which serve produce grown on site as well as fish caught within the harbour. Hanging hydroponics are also located within the circulation space within the tower.

One of the main advantages for the location of the building is the fact that it has one of the best direct views to the statue of liberty. The restaurants within "The Turret" take full advantage of this. The roof of the building is 200m promenade that is accessible to the public.



COOK

FAT



#### 116 MArch Y2

# THE HOUSING FACTORY

#### Sophie Heaford

Set in Red Hook, Brooklyn, a post industrial area with high levels of unemployment, low levels of education and a large proportion of residents living in inadequate public housing blocks, the Red Hook Projects, the proposal introduces the timber industry to become the first solid timber panel processing facility in the USA.

The factory is divided into manufacturing spaces for four different timber products (ICLT, brettstapel, wood fibre insulation and SIPs) with a biomass CHP unit and research facility into engineered timber as well as public facilities including a library, exhibition space and woodworkshops. The factory will produce self build flat pack house kits composed of structural, insulated solid timber panels with integrated service runs, connections and fenestrations.

Houses will be constructed on the vacant plots throughout Red Hook. To fit within the existing urban fabric and plot restrictions the design is a terrace style house. Each house will be divided into three units plus a communal living, washing and activity space. Residents for these new builds will be elderly people and single parents from the Red Hook Projects who will mutually benefit from the living support not available elsewhere.









## 118 MArch Y2 TIMBERLAND

#### Hannah Dixon

Timberland, New York, is a timber recycling facility and educational visitors' experience. Based in Red Hook, Brooklyn, the factory processes all of Brooklyn's timber waste (approx. 100,000 tonnes per year) through three types of timber recycling: REMANUFACTURING, RECLAMATION and BIOFUEL.

Through introducing this new, 'clean' industry to Red Hook the factory will be providing employment both directly and indirectly to the local people. The scheme itself will also provide facilities for the local community, bringing life back to a under-used industrial area. Forming part of a wider master plan - Recycling World - the scheme aims to educate and inform the people of New York of the immediate and long term of advantages of recycling. At present only 17% of households in New York recycle. The master plan also aims to tackle the wider issue of waste disposal, as New York currently exports all of its waste to New Jersey at a cost of over \$400 million a year.

The factory is designed about the optimisation of daylighting and natural ventilation, and employs river cooling and a CHP Plant. It is made entirely from recyclable materials with low or negative carbon footprints.











# In Havana a period of transition and urban renewal is expected. Besides the renovation of existing buildings the substitution by new structures will become necessary in the central area of the metropolis. By these interventions urban life should be preseved in the central area of the metropolis in order to avoid the translocation of central activities to the outskirts.

The aim of the Winter School is to discuss new design strategies for housing, that meet the specific social and economic needs of the people of Cuba. The practicality of the strategies thus developed shall be tested by a design project in the quarter "Centro Habana" in the center of Havanna, with a special focus on organizational principles and the new relationship to the built environment.



## CUBA STUDY TRIP

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## HAVANA, CUBA

Nicholas Dunlop, Curtis Martyn, Richard Jefferis, Georgina Rose Walker, Jennifer Yan

In February 2013, five MSA students participated in the 4th Caribbean Winterschool held in Havana, Cuba. The event comprised three different schools of architecture from Instituto Cujae (Havana, Cuba), Münster School of Architecture, Universitat Politècnica de Catalunya and Manchester.

Working in international teams, we spent three weeks exploring Cuban housing and making proposals for a site in municipality Centro Havana. This was a fantastic opportunity to get away from our rainy city and engage with designing for a different culture. All of us learned an enormous amount about architecture for tropical climates as well as the social and political factors that are so inextricable from Cuban culture.

These pictures show us having lots of fun, we also worked incredibly hard as demonstrated by our individual project pages.















**124** CUBA

## CUBA: SAN RAFAEL

#### **Richard Jefferis**

This project was completed as part of the 4th Caribbean Winterschool 2013 held in Havana, Cuba. The project is the result of a three week design school with participation from Masters level architecture students from Germany, the UK and Cuba. In teams of four, we made proposals for housing for the up-and-coming area of Centro Habana, close to the tourist district of Habana Vieja.

The scheme draws heavily on Cuban culture, and the design was informed by many interviews with Cuban families and design analysis of community interaction. As outsiders, we engaged with key issues such as privacy, noise, ventilation and electricity black-outs, while simultaneously understanding the politics of space in the city of Havana.

In addition to this deep understanding of the way people function in teh city, we incorporated an urban farm into the project, a common sight in Havana, which produces food for the residents. Rather than add a farm as an afterthought, the scheme aims to involve the residents as much as possible and a simple but effective network of wheeled carts facilitates the transfer of soil, plants, food and tools throughout the building.





# 126 CUBA

#### Georgina Rose Walker

COA is a hotel strategy that will be designed using computer 3D modelling tools but realised through building with local to the island, sustainable materials and known construction methods. It is a strategy, that because of the governmental legislation changes in 2011, allows local Cubans to start up their own hotel enterprises and advertised buisnesses within the encourgaed growing tourism sector at relatively low costs and ease of realisation.

The COA detailed Villa is an exampler hotel prototype, of which Cubans may take design strategies from and adapt in order to become a started by themseleves hotel facility relavant to their chosen specific location and facility needs.

COA can be started on a variety of sites and is relies on passive environmental or sustainable strategies. If situated on a low-grade, susceptible to soil erosion, piece of land, the process of building and running COA re-juvenates the soil to increase its markert value, while at the same time it provides a service that earns money through staying guests.







## REGENERATE WITH PAPER

#### Jennifer Yan

Building deterioration is a critical problem in Central Havana, Cuba. On average, three buildings collapse in the area everyday. Without the government's support, it is impossible for Cubans to afford the soaring priced construction material to repair the buildings. However, the government, with the limited resources, is only restoring the profitable tourist areas.

To mitigate the problem, buildings in critical condition must be safely taken down before they collapse and cause further accidents. Buildings in acceptable condition will be structurally supported until enough money is raised for restoration. Intermediate habitable space and cultural spots will be constructed in the vacant plots with cheap and highly reusable and recyclable materials: recycled rubbles, bagasse paper tubes and banana fabric.

This proposal intends to infuse cultural tourism into Central Havana, where tourists and Cubans will have the opportunities to learn about each others culture. Tourism, the most efficient way of gaining profit, will bring in more business opportunities for the locals, thus accelerate the regeneration process.



The Urban Design Workshop in Nicosia in which qed students collaborated with staff and students from the University of Nicosia was a great opportunity to explore sustainable futures in a unique urban setting. The brief for the project required teams of students to imagine and illustrate an evolutionary ecology for the city focussed on the buffer zone between the Greek and Turkish communities of the `divided city`. Students were asked to explore development over time that might evolve in the abandoned buildings and spaces that form the buffer zone. Emphasis was placed on projects that demonstrated a systematic approach to the colonisation of these areas within the interpretation of a future scenario informed concepts relating to sustainable urbanism.

The intense charette occurred over a few days with site visits, development workshops and final presentations from six groups of students. The outputs were communicated in animated films and a complementary portfolio material including ecological models and diagrams, physical models and a variety of visualisations.

### $\bullet \quad \bullet \quad \bullet \quad \bullet$

## CYPRUS STUDY TRIP

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## NICOSIA, CYPRUS

Lorena Chan, Warren Suen, Gin-Yee Luu, Omer Osman, Weibin Chen, Mohamed Haisham

A week-long exchange trip to Cyprus was taken by six QED students, working on a four day workshop with third year Architecture students at University of Nicosia, led by tutors at University of Nicosia; Markela Menikou and Adonis Cleanthous.

The workshop involved a short project, "Connect the Dots", located at the UN buffer zone, separating Cyprus and Turkey. The project revolves around themes of the QED atelier and developments of students of Nicosia University's current project. The brief entails creating a link from one side of the buffer zone to the other, in order to develop the abandoned area. The first day included a site visit along the buffer zone boundary, to observe the surroundings and entry points. Each QED student led a group of six, recycling ideas from previous projects and developing links to their current project of a vertical farm. The project used different media, such as sketch models, diagrams, moments (montages) to explore ideas. Each project was presented as a short video on the final day of the workshop. The following projects: 2 B Green (Warren Suen), Bicycle Market (Lorena Chan), Waterevolution (Omer Osman), Reaching the Clouds (Mohamed Haisham), The Doppler Effect (Weibin Chen), Better Buffer (Gin-Yee Luu)









## NICOSIA, CYPRUS

Lorena Chan, Warren Suen, Gin-Yee Luu, Omer Osman, Weibin Chan, Mohamed Haisham

The exchange to Nicosia was an oppurtunity for students to gain an insight into the study environment at another architecture school, of a foreign country. The architecture tutors and students at University of Nicosia were particularly welcoming and enthusiastic. During the workshop, QED students were challenged to lead a group project and share ideas of our atelier within a short space of time.

In addition to the workshop, students also had the oppurtunity to explore Nicosia and the nearby towns with the guidance of host students at the University of Nicosia. Students also experienced the cultural celebrations at the annual festival in Limassol.











For the past six years MSA have run a successful events programme with the key agenda of connecting students from Year 01 and 02 Architecture and Landscape with MArch students through projects which engage public space in the city. This year the events focussed on the idea of 'collaboration and the city' and will be collectively named 'Crossings'. Each event was created, and delivered by groups of 2 - 4 students in MArch Year 1 and formulated with four key elements, agenda, collaborator, production and mastercraft. In short each project brief had an agenda that was developed alongside an external collaborator with an output that could/would manifest in the city.



## MSA CROSSINGS

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# CROSSINGS WAS\_HERE

Danielle Foster, Gin-Yee Luu, Lorena Chan

WAS\_HERE set out to produce a limitless number of photographs within the boundary of the Northern Quarter using vintage, Lomo and film cameras. Everyone was asked to capture "resilience" and encouraged to express a personal interpretation of this.

A mixture of group and individual work took place, with students learning how to load and use film cameras, develop films with chemicals in a darkroom and collaborating to produce a wall of photographs and a book.

Following the hard work put in by all group members, the final outputs are both engaging and rewarding. The book created is simple, allowing emphasis to be placed on the photographs, with small pieces of text to simply describe findings. The wall of photographs stresses the volume of research and exploration that took place and the use of film cameras helped poetically illustrate the Northern Quarter. In short, film cameras have in fact become resilient in their own right, despite advancing technologies, and their use has helped capture and explore the theme in the most effective and sometimes challenging way.







## GUERRILLA TACTICS

Ben Elford, Christian Wren, Jemie Ejekam, Yuni Kartika Shaw, Zuben Markanday

Guerrilla marketing is an advertising strategy in which low-cost unconventional means are utilized, often in a localized fashion or large network of individual cells, to convey or promote a product or an idea. It relies on time, energy and imagination rather than a big marketing budget. Campaigns are unexpected and interactive; creating a unique, engaging and thought-provoking concept that stimulates a sense of intrigue and hopefully becomes viral. Guerrilla Tactics took a fresh approach to this marketing strategy, getting our students to explore it from an architectural point of view, promoting the National Football Museum in Manchester. How can the urban setting and public be linked through the vehicle of football themed Guerrilla installations? We asked our students to compose a marketing campaign made up of three components, an interactive poster, a small-scale executable public installation, and a large-scale conceptual installation. Each subsequent task would introduce a new scale of Guerrilla Marketing and open up a new set of ideas and approaches to be experimented with and tested. Our students came up with a string of innovative and exciting ideas that they pitched to the captivated Commercial and Marketing Directors of the museum in the final session.









## HIT SQUAD

#### Nicholas Dunlop, Mariacarla Norall, Katie Livermore, Rufeo Nugent

The MSA crossings Event : Hit Squad was a collabration between QED, MSAp and the MSSA (Manchester Student Socitey of Architecture).

- It was a practical film workshop with a big emphasis on experimentation and discovery.
- Film is a media which can be easily understood by a much wider

public, so having an understanding of how to make a successful video. Is a key skill for communtincation.

The workshop ran for six days, each day the participants were encouraged to expolre different filming technecs and get to grips with film design tools like story boarding. Eventually they were spilt into three teams, to work on a final video. The best was selected to be entered into a competition on the behalf of the MSSA

This can be seen at : http://www.youtube.com/watch?v=PM1GcJQox1w

Or search "Manchester MSSA" on YouTube.






144 msa crossings

### CROSSINGS PIMP YOUR STUDIO

Omer Osman (with Alex Neill, Rachel Patrick-Patel & Olivia Taylor from Re\_Map)

**Pimp Your Studio** was a collaborative event between students from ateliers QED and Re\_Map. Since the move of the Manchester School of Architecture [MSA] to John Dalton West {the shed}, scrap materials found in the building have increasingly featured within student projects. Pimp Your Studio proposed the 're-use' of these materials to create functional, objects that can be utilised within the new Chatham building. With restrictions on the types, dimensions and properties of the materials available, students in the event were encouraged to design with these limitations in mind.

The event looked to promote the idea of designing through making. The final objects were required to be transformable, mobile and modular, allowing them to be moved around the new Chatham building according to the needs of the users. This resulted in a variety of ideas which were narrowed down to three; new seating/shelving units for the MSSA office, a seating unit for the new rooftop courtyard and a table/drawing board for use in thearchitecture studios.









### MM + FC BRICK

James Slocock & Lee Herrick

MM + FC's agenda was to produce a series of well-crafted, simple yet elegant brickwork sculptures that would aid in producing a welcoming and improved entrance/ social terrace area to the front of the Moston Miners Community Club. The event ran for six days. Three days of designing and three days of building.

Our principle collaborators were ibstock brick manufacturers, CPI mortars and Stockport College - who all offered their services and products to assist with this project. Our outcome for the project was to introduce our undergraduate architects to a practical skill. Fundamentally our crossings event pushed the boundaries of brickwork design, combining traditional techniques, challenging the preconceptions of brickwork and aiding an important and useful works to a growing community venture.

The concept of the 'QR Bricks' revolves around trying to create an 'interactive brick.' The bricks have our sponsors' logos lasered into the stretcher side with a generated QR code which, when scanned by a android mobile phone, takes you directly to their website. We've used this idea as a promotional/ marketing strategy, fundamentally a test bed for challenging the idea of creating an interactive brick.









### TOWARDS THE DIGITAL MASTER **BUILDER**

Mohamed Haisham, Alexandr Valakh, Warren Lampson Suen, Weibin Chen

Architects have long been disconnected from the skill of crafting, relying instead on third party agents to realize their designs. Architects work in abstraction; our processes are only representation that are mediated through the skills of our agents (contractors, builders) on site.

Digital Fabrication techniques place the process of design closer to the production of buildings. The significance of this should not be underestimated, as this seemingly benign shift in how we communicate carries the potential not only to reconnect to craft but also to completely restructure the organization and hierarchy of the design building industry, and perhaps once again make it possible for architect to be recognized as a Master Builder.







"CAKES!!!! What would QED be without its cakes. A hollow empty shell, a void of confused and quite peckish students! That's what!

#### 2012 OED CAKE NEWS

competition entries winning both first and second prizes in the blue riband competition for fruit cakes and first prize in the `welsh oggie` competition in Wales at Nantmel Show and

# QED FRIDAY CAKE RECIPES





### MARBLE BROWNIE

#### **INGREDIENTS**

#### **Brownie Ingredients**

200g plain chocolate 200g unsalted butter 250g caster sugar 3 eggs 125g plain flour

#### Cream Cheese Ingredients

400g cream cheese 1 tsp vanilla extract 125g caster sugar 2 eggs

- Heat the oven to 180C/fan or 160C/gas 4. Butter and line a 20cm x 30cm deep baking tin with baking parchment. To make the cream cheese mix, beat together the cream cheese, vanilla extract, caster sugar and eggs until smooth and creamy.
- 2. To make the brownie mix, melt the chocolate and butter in a heatproof bowl set over a pan of barely simmering water or in 20-second blasts in the microwave. Stir until smooth then cool slightly.
- In another bowl whisk together the caster sugar and eggs. Add the melted chocolate and butter mix and stir until combined. Sieve the flour and fold into the mixture.
- 4. Pour 3/4 of the chocolate mix into the prepared tin and level with a palette knife. Spoon over the cream cheese mix. Add the remaining chocolate mixture in dollops and tap the tin sharply on the work surface to level the mixtures. Using a skewer, marble the mixtures together. Bake for 35-45 minutes, until just set in the middle. Cool in the tin before cutting into squares.





## PRAGUE BRIDGE CAKE

#### **INGREDIENTS**

4 ½ oz/ 6 tbsp Golden Syrup or corn syrup 2 sticks/200g unsalted butter 12 oz/330g porridge oats Lots of melted chocolate

- 1. Butter a 9"x 13"/23cm x 33cm Swiss roll tin and line the base with baking parchment.
- 2. Place the syrup and butter into a large saucepan and heat gently until the butter has melted into the syrup and stir well. Make sure you add all the golden syrup, sometimes it is hard to get it exact and more is always better than less if you want your flapjack gooey but not falling apart.
- 3. Put the oats into a roomy baking bowl, add a pinch of salt then pour over the butter and syrup mixture and stir to coat the oats.
- 4. Pour the mixture into the prepared tin and spread evenly to fill the tin making sure the surface is even.
- 5. Bake in the preheated oven for 25 minutes or until golden brown. Remove from the oven while the flapjack is still slightly soft, they will harden once cool.
- 6. Cut out your desired bridge shape whilst soft and then let cool
- 7. Use melted chocolate as a binding adhesive.





### CHINESE EGG TARTS

#### **INGREDIENTS**

#### Ingredients of crust:

225 gm plain flour 125 gm butter 55 gm icing sugar 1 egg, whisked a dash of vanilla extract

#### Ingredients of custard:

3 eggs 110 gm caster sugar 225 gm hot water 85 gm evaporated milk 1/2 tsp vanilla extract

#### Method (making crust):

1.Place butter at room temperature until softened. Cream the butter and sugar with an electric mixer over medium speed until the mixture is smooth, fluffy and light in color.

2.Add in whisked egg, half at a time, beat over low speed. Add vanilla extract, mix well.

3.Sift in flour in two batches, scraping down the sides of the bowl between additions with a spatula, and make sure all ingredients combine well. Knead into dough.

4.Roll out the dough to a 1/2 cm thickness. Cut dough with a cookie cutter that is just a bit smaller than your tart tin in size. Line dough in the middle of tart tins, one by one. Lightly press the dough with your thumbs, starting from the bottom then up to the sides. While pressing the dough, turn the tart tin clockwise/anti-clockwise in order to make an even tart shell. Trim away any excess dough.

5. Using a fork carefully prod the inner base of the tart shell

#### Method (making custard):

1.Add sugar into hot water, mix until completely dissolved. 2. Whisk egg with evaporated milk. Pour in sugar water. Mix well. 3.Sift egg mixture to get rid of any foam. Carefully pour egg mixture into each tart shell.

#### Method (baking tarts):

1. Preheat oven to 200C. Position rack in lower third of oven. Bake tarts for 10 to 15 minutes until the edges are lightly brown.

2.Lower the heat to 180C. Keep an eye on them. Once you see the custard being puffed up a bit, pull the oven door open about 2 to 3 inches. Bake for another 10 to 15 minutes until the custard is cooked through. Just insert a toothpick into the custard. If it stands on its own, it's done.





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## SILO CAKE

#### INGREDIENTS

45g butter 300g mini marshmallows 180g rice krispies chocolate and sprinkles

- 1. Melt the butter in a large, heavy-based saucepan over a low heat.
- 2. Add the marshmallows and cook gently until they are completely melted and blended, stirring constantly.
- 3. Take the pan off the heat and immediately add the rice crispies, mixing lightly until well coated.
- 4. Press the mixture onto a greased tin gradually and mould to form a silo shape, you may have to put on plastic gloves as it will be very sticky.
- 5. Melt chocolate in a pan and drizzle over the silo cake and scatter with edible glitter or sprinkles.
- 6. Let the cake cool completely in the tin before serving











### COCONUT CAKE

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#### **INGREDIENTS**

Serves 6

- 200g (8 oz) plain flour
- 1/2 teaspoon salt
- 2 teaspoons baking powder
- 75g (3 oz) butter
- 75g (3 oz) sugar
- 50g (2 oz) desiccated coconut
- 1/2 teaspoon grated lime zest
- 1 egg
- 125ml milk
- 1 teaspoon vanilla extract

#### METHOD

Prep:20min > Cook:40min > Extra time:40min > Ready in:1hr40min

- 1. Sift flour, salt and baking powder together into a bowl. Rub in the butter until mixture looks like fine breadcrumbs. Add sugar, coconut and lime zest.
- 2. In a separate bowl, beat egg and add 100ml of the milk and vanilla.
- 3. Make a well in centre of flour mixture. Add liquid and mix well to form a stiff consistency, adding the additional milk if necessary.
- Place in a greased 15cm (6 inch) cake tin and bake at 180
   C / Gas 4 for 40 minutes, or until a knife inserted in the middle comes out clean.
- 5. Icing ideas...
- 6. Try this Coconut cream cheese icing or try a simple buttercream, then sprinkle with more coconut. For an especially pretty presentation, toast the coconut in a dry frying pan for a few minutes over medium heat.









### CHOCOLATE CUPCAKES

#### **INGREDIENTS**

- 100g plain flour
- 20g cocoa powder (i use cadbury bourneville)
- 140g caster sugar
- 1 1/2 tsp baking powder
- a pinch of salt
- 40g unsalted butter (essential that it is at room
- temperature)
- 120ml whole milk
- 1 egg
- 1/4 tsp vanilla extract
- a 12-hole cupcake tray, lined with paper cases

- 1. Preheat the oven to 170C(325F)Gas 3
- 2. Out the flour ,cocoa powder,sugar,baking powder,salt and butter in a free standing electric mixer with paddle attachment (or use a handheld electric whisk)and beat on a slow speed until you get a sandy consitency and everything is combined.
- Whisk the milk,egg,and vanilla extract together in a jug ,then slowly pour about half into the flour mixture,beat to combine and turn the mixer up to high speed (scrape any unmixed ingredients from the side of the bowl with a rubber spatula). Continue mixing for a couple more minutes until the mixture is smooth.Do not over mix.
- 4. Spoon the mixture into the paper cases until two-thirds full and bake in a preheated oven for 20-25 minutes,or until the sponge bounces back when touched. A skewer inserted in the center should come out clean. Leave the cupcakes to coll slightly in the tray before turning out onto a wire cooling rack to cool completely.
- when the cupcakes are cooled, spread the frosting on with a pallet knife, or sqweeze in with a piping bag and decorate with chocolate vermicelli or silver balls. (see chocolate frosting ) Vanilla and Cream cheese frosting also works well if your not a chocolate lover











## STRAWBERRY & CREAM SPONGE

#### INGREDIENTS

#### Sponge

200g Caster sugar 200g Butter (Softened) 4 Medium sized eggs, beaten 200g self-raising flour 1 tsp Baking powder 2 tbp milk 1 tsp Vanilla Extract

#### **Filling and Cream**

200ml/7 fl oz whipping cream Drop of Vanilla Extract 60gm Icing Sugar A jar of good quality strawberry jam 225gm Fresh Strawberries

#### METHOD

#### SPONGE

- 1. Heat the oven to 180C/Fan 160/Gas 5.
- 2. Butter and line 2x20cm sandwich tins with parchment paper.
- 3. In a large bowl, beat butter and sugar until fluffy, add the beaten eggs and rest of the ingredients. Mix all until u have a smooth soft batter.
- 4. Divide the mixture in equally and pour in to prepared pans. Smooth the surface with the spatula and then bake for 20 minutes or until golden brown or until a toothpick comes out clean.
- 5. Carefully remove the cakes from the tins and leave to cool completely on the cooling rack.

#### **FILLING & CREAM**

- 1. Whip the cream slowly adding icing sugar. Add in the vanilla and beat until soft peak form.
- Once the cakes are cooled down, add a layer of whipped cream on to the cake, followed by a layer of jam and then top it with sliced strawberries. Do this in as on the second cake as well. ( if you want more layers, divide the cakes half and fill in them as well.)
- 3. Sandwich the layers and let it cool in the fridge for 10 minutes.
- 4. Serve it with some fresh cream or some icing sugar for a sweeter
  - taste.





### EMOTOWN TIRAMISU

#### **INGREDIENTS**

568ml pot double cream 250g tub mascarpone 75ml Marsala 5 tbsp golden caster sugar 300ml strong coffee , made with 2 tbsp coffee granules and 300ml boiling water 175g pack sponge fingers 25g chunk dark chocolate 2 tsp cocoa powder Lots of alcohol (eg Cointreau) Orange peel garnish

- 1. In a heatproof bowl set over a pan of gently simmering water, whisk together the egg yolks and sugar with the vanilla seeds or extract until thick and creamy using a hand-held electric or rotary whisk. The mixture is ready when a trail of foam forms as you lift up the beaters.
- 2. Remove from the heat and leave to cool. Beat in the mascarpone, then fold in the whipped cream. Set aside.
- 3. Mix the coffee with the liqueurs. Dunk the Italian biscuits or sponge fingers quickly into the coffee, making sure that they are completely immersed. If using sponge fingers, don't leave in the coffee for more than a second, or they will turn soggy. Arrange the biscuits or fingers in a layer in a serving bowl and top with half the mascarpone and cream mixture.
- 4. Repeat with another layer of dunked biscuits or fingers and the remaining mascarpone and cream mixture. Sift the cocoa powder over the top in an even layer. Cover and refrigerate for at least 2 hours.









## BLUEBERRY & WHITE CHOCOLATE COOKIES

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#### INGREDIENTS

Serves: 25

- 225g (8 oz) unsalted butter, softened
- 225g (8 oz) caster sugar
- 170g tube Carnation Condensed Milk
- 350g (12 oz) self-raising flour
- $\bullet$  150g (5½ oz) white chocolate , chopped
- 175g punnet blueberries

#### METHOD

Prep:10min > Cook:15min > Ready in:25min

Preheat the oven to 180 C / Gas 4.

In a large bowl, cream the butter and sugar until pale, and then stir in the condensed milk. Sift in the flour and then work into a soft dough with your hands. Mix in the chocolate. Take a small handful of dough and flatten with your fingers. Place 2-3 blueberries into the centre of the cookie and fold over the sides of the dough to encase the blueberries. Repeat with the remaining dough.

Place onto parchment lined baking trays, spacing well apart and bake for about 15-18 minutes or until golden brown at the edges, but still a little soft.

Leave to cool slightly and set before transferring to a cooling rack.



### GEESE FAIRY CAKES

#### INGREDIENTS

- 100g/3½oz unsalted butter, softened 100g/3½oz caster sugar
- 2 free-range eggs, at room temperature, lightly beaten
- 100g/3<sup>1</sup>/<sub>2</sub>oz self-raising flour
- 1 tsp vanilla extract
- ¼ tsp fine salt
- 1 tbsp milk

#### METHOD

- 1. Preheat the oven to 180C/350F/Gas 4 and line a 12-hole bun tin with 12 paper fairy cake cases. (Or for deep American-style cupcakes, line a 6-hole muffin tin with larger muffin cases.)
- 2. Place the softened butter in a large bowl then beat with an electric hand-whisk until pale and fluffy. Gradually add the sugar and continue to beat until fully combined.
- Add a little of the beaten egg to the butter mixture, then whisk again. Gradually add the egg, little by little, whisking after each addition. It's important to go slowly here, as adding too much egg at once can cause the mix to split. If it does split, simply add a tablespoon of the flour and whisk until the batter is smooth again.
- 4. Sift the flour into the bowl. Using a large metal spoon or spatula, fold the flour into the cake mix.
- 5. Add the vanilla and the salt and stir to combine. Add the milk to get the cake mix to a soft dropping consistency, where a heaped spoonful of mixture falls off the spoon after tipping it for few seconds.
- 6. Using two dessert spoons (one to scoop and the other to push the mix into the tin), fill the paper cases half full with the batter, filling them equally.
- 7. Bake the fairy cakes for 15 minutes in the middle of the oven, until golden-brown and the cakes spring back when pressed lightly. (Bake cupcakes for 18-20 minutes.)
- 8. When cool enough to handle, lift the cakes onto a cooling rack and leave to cool completely.

#### FOR THE FINISHING

- Whilst cooking the buns place a punnet of strawberries on a plate and cover with sugar. Leave to dissolve into a syrup. After baking the cakes, stir the strawberries to create a fresh jam.
- 2. Whilst cooking the buns melt chocolate. Once melted use the pipe the chocolate onto baking paper in the form of geese necks with heads at the top (these are used later to create the appearance of the buns as geese).
- 3. Once cooled slice of the top of the fairy cake and slice this into two halves.
- 4. Whip some double cream till stiff peaks form. Put into a piping bag.
- Pipe whipped cream onto the top of the bun, replace the two halves of the top back onto the bun in the form of two wings.
- 6. Place some of the jam between the 'wings'.
- Place one of the heads into the gap between the wings into the cream to make sure it stands up.
   Sprinkle the hole bun with icing sugar.





### CHEESECAKE

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INGREDIENTS

- 1-1.5 cups digestive biscuit crumbs
  3 tbsp sugar
  1/3 cup butter, melted
  4 packages philadelphia cream cheese, softened
  1 cup sugar
  1 tsp. vanilla
- 4 eggs

- 1. HEAT oven to 180°C.
- 2. MIX biscuit crumbs, 3 Tbsp. sugar and butter; press onto bottom of 9-inch springform pan.
- 3. BEAT cream cheese, 1 cup sugar and vanilla with mixer until well blended. Add eggs, 1 at a time, mixing on low speed after each just until blended. Pour over crust.
- 4. BAKE 55 min. or until center is almost set. Loosen cake from rim of pan; cool before removing rim. Refrigerate 4 hours.



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### NUCLEAR SPONGE .....

#### INGREDIENTS

- 4 eggs
- 25/8 OZ caster sugar, extra for dusting
- 2tsp baking powder
- 225g/8 OZ baking spread, margarine or soft
- butter at room temperature
- 2 tsp baking powder

- 1. Heat the oven to 180C/350F/Gas 4.
- 2. Line two 18cm/7in cake tins with baking parchment
- 3. Cream the butter and the sugar together until pale. Use an electric hand mixer if you have one.
- 4. Beat in the eggs.
- 5. Sift over the flour and fold in using a large metal spoon.
- 6. The mixture should be of a dropping consistency; if it is not. add a little milk.
- 7. Divide the mixture between the cake tins and gently spread out with a spatula. Bake for 20-25 minutes until an inserted skewer comes out clean. Allow to stand for 5 minutes before turning on to a wire rack to cool.
- 8. Sandwich the cakes together with jam, lemon curd or whipped cream and berries or just enjoy on its o







### OLIVE OIL CAKE

#### INGREDIENTS

150 ml regular olive oil (plus more for greasing) 50 grams good-quality cocoa powder (sifted) 125 ml boiling water

- 2 teaspoons best vanilla extract
- 150 grams ground almonds (or 125g plain flour
- / 3/4 cup plus 1 tablespoon all-purpose flour)
- 1/2 teaspoon bicarbonate of soda
- 1 pinch of salt
- 200 grams caster sugar
- 3 large eggs

- Preheat your oven to 170°C/gas mark 3/325°F. Grease a 22 or 23 cm/ 9inch springform tin with a little oil and line the base with baking parchment.
- Measure and sift the cocoa powder into a bowl or jug and whisk in the boiling water until you have a smooth, chocolatey, still runny (but only just) paste. Whisk in the vanilla extract, then set aside to cool a little.
- 3. In another smallish bowl, combine the ground almonds (or flour) with the bicarbonate of sodaand pinch of salt.
- 4. Put the sugar, olive oil and eggs into the bowl of a freestanding mixer with the paddle attachment (or other bowl and whisk arrangement of your choice) and beat together vigorously for about 3 minutes until you have a pale-primrose, aerated and thickened cream.
- 5. Turn the speed down a little and pour in the cocoa mixture, beating as you go, and when all is scraped in you can slowly tip in the ground almond (or flour) mixture.
- Scrape down, and stir a little with a spatula, then pour this dark, liquid batter into the prepared tin. Bake for 40-45 minutes or until the sides are set and the very centre, on top, still looks slightly damp. A cake tester should come up mainly clean but with a few sticky chocolate crumbs clinging to it.
- 7. Let it cool for 10 minutes on a wire rack, still in its tin, and then ease the sides of the cake with a small metal spatula and spring it out of the tin. Leave to cool completely or eat while still warm with some ice cream, as a pudding.





## MEDOVNIK HONEY CAKE

#### INGREDIENTS

#### For cake layers:

- 1cup of butter or margarine
- 3 eggs
- 1 1/2c. sugar
- 3 T. (dark!) honey
- 1 T. baking soda
- 3 c. flour

#### For fillings:

- 1 can sweetened condensed milk 1c. finely chopped walnuts or pecans
- 2T. flour
- 1/2c. milk
- 1/4c. Crisco
- 1/4 c. butter or margarine
- 3/4c. sugar
- 1/2t. vanilla
- pinch of salt

#### METHOD

- 1. Preheat oven to 350 degrees
- 2. Melt butter completely in microwave or over stove.
- 3. Whisk in eggs
- 4. Gradually add sugar, honey, baking soda and flour, mix until smooth.
- 5. Place sheets of parchment paper on baking sheets and trace circle around a cake pan (I used 8 inch and fit two per baking sheet)
- 6. Spoon batter into each circle and spread out thin until circle is filledlike a giant pancake- PAST the lines you traced.
- 7. Bake for 7-10 minutes until golden brown. Watch it closely as it goes from uncooked to golden very quickly.
- 8. Slide layers off sheet by pulling parchment paper onto a cool counter and allow layers to cool.
- 9. Repeat this until you have 6 layers.
- 10. Using a cake pan, cut each layer into a circle and pull away excess cake from edges (save this in a separate bowl). Gently peel away parchment paper from bottom of each layer as you assemble the cake.
- 11. Put excess cake edges into a food processor and chop into fine crumbs.

#### Filling

- 1. Combine sweetened condensed milk with finely chopped nuts (this is your 1st filling)
- 2. Cook 2T. flour and 1/2 c. milk together over stovetop until thick and smooth. Cool completely. Add Crisco, butter, sugar, vanilla and salt and whip this together until light and fluffy. (this is your second filling)

#### Assembling Cake

- 1. Place one layer of cake on a serving plate.
- 2. Top with cream filling and spread to edges.
- 3. Place another layer of cake on top of cream filling.
- 4. Top with sweetened condensed milk/nut layer and spread to edges.
- 5. Repeat this until all cake layers are used. You should use all of cream filling and about 1/2 of condensed milk filling.
- Spread remaining condensed milk/nut filling over top and sides of cake.
- 7. Press chopped cake crumbs into top and sides of cake.
- 8. Refrigerate and serve!



