This publication documents the work of architecture students at both degree and masters level at Northumbria University in 2011.
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NORTHUMBRIA PROJECTS 2011
foreword

Welcome to Northumbria Projects 2011, the yearbook of the architecture programmes at Northumbria University.

This publication serves as a record of the work of those students graduating in the summer of 2011, and evidences a thriving and diverse range of thinking and production within our architecture courses.

The architecture staff members at Northumbria are focused on the provision of quality teaching and learning, and in developing students’ skills and knowledge in order to achieve their full potential. Paul Jones, Director of Architecture Programmes, has recently been awarded a National Teaching Fellowship, the most prestigious award for excellence in Higher Education Teaching, in recognition of his leadership in promoting high quality teaching.

As a result of this dedication, and coupled with the provision of excellent studio space, Northumbria has engendered an exceptional ‘studio culture’, where students learn and develop through ongoing dialogue with staff and peers alike.

This studio culture reflects authentic practice, and prepares students well for a life in architecture. A key feature of the course is a constant engagement with practice on both local and national levels, with notable practitioners visiting to engage in studio reviews, presentations and learning activities.

Staff members themselves comprise a selection of architects who have worked for national and international award-winning practices. Taught modules are therefore underpinned by both practical experience and theoretical credibility derived from Northumbria’s growing reputation for research. High standards of scholarship are thereby achieved in a friendly, supportive, student-centred environment.

These factors, along with the strong links with practice, have served to maintain an exceptional record for graduate employment, with 95% of the 2010 degree course cohort either finding employment or going on to further study within 6 months of graduation (unistats.com).

In the twelve years since the undergraduate architecture programme commenced at Northumbria, both architecture courses have grown in stature and are now highly respected in the wider academic and architectural communities. This growth will continue in 2011, with Interior Architecture being added to the suite of programmes on offer at Northumbria, drawing upon staff expertise in interior design, building refurbishment and architectural theory.

The quality of the courses can be seen in the comments of the external examiners which have consistently reported that there is an extremely high level of dedication, enthusiasm and support from the staff; this is evidenced year on year with excellent student satisfaction ratings in the National Student Survey results with the programmes at Northumbria having the highest satisfaction score of all architecture courses in the country in 2010 (unistats.com).

This success can also be seen through the achievements of the students, with four student projects being shortlisted in the international RIBA presidents Medals competition in the last three years, along with several other national level award wins recently being achieved by students including the RIBA Hadrian Medals, 3D Reid, NAA, NDC, BCO and APS regional and national awards.

Northumbria’s student centred and inclusive approach is demonstrated through all graduating students being afforded the opportunity to feature in this publication. This is a clear testament to the high quality levels of learning and creativity permeating the work of all of our students.

Peter Beacock : Head of Department Architecture Engineering + Construction
Benjamin Elliott : Editor + Programme Leader BA(hons) Architecture
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awards + prizes

“Northumbria has a strong studio culture, drawing on powerful regional roots... All design work is progressed through intensive model-making, complementing painterly renderings of technically literate drawings...”

- Tim Carlyle writing for the Architects Journal
awards + prizes

RIBA Presidents Medal Silver Award Shortlist 2010: Reah Booth
awards + prizes

RIBA Presidents Medals 2011 Silver Medal Nominee &
RIBA Postgraduate Hadrian Medal Commendation 2011: Holly Galbraith

(see page 186)
awards + prizes

RIBA Presidents Medals 2011 Silver Medal Nominee: Jonny Flavin

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Halsall Lloyd Design Project Prize Winner 2011 &
3D reid Prize Nominee 2011: Paul Browning
(see page 204)
awards + prizes

Glover Prize Winner 2011; Mark Steedman

(see page 198)
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RIBA Postgraduate Hadrian Medal Nominee 2011; Chris Permain

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RIBA Postgraduate Hadrian Medal Nominee 2011; George Mokhtar
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RIBA Postgraduate Hadrian Medal Nominee 2011; Jonathan Mole

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RIBA Postgraduate Hadrian Medal Nominee 2011; Mark Whiting

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RIBA Postgraduate Hadrian Medal Nominee 2011 &
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RIBA Presidents Medals 2011 Bronze Medal Nominee &
RIBA Undergraduate Hadrian Medal Nominee 2011; Alastair Speak
(see page 50)
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RIBA Presidents Medals 2011 Bronze Medal Nominee &
RIBA Undergraduate Hadrian Medal Commendation 2011; Joseph Warner
(see page 140)
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RIBA Undergraduate Hadrian Medal Commendation 2011: James Van Geffen

(see page 78)
awards + prizes

Winner of the 2011 Ibstock Design Prize & RIBA Undergraduate Hadrian Medal nominee 2011; Samuel Sedgewick

(see page 116)
The part one programme at Northumbria equips students with the skills necessary to thrive in architectural practice. Architecture is a complex subject, and students develop the ability to think critically, independently and creatively through engagement with two design projects in their final year. This programme is prescribed by the ARB and validated by the RIBA.

These projects form a balanced portfolio and provide vehicles for learning the associated elements of theory, technology, management and sustainable design. This approach constructively aligns the assignments to the studio projects, helping the students to engage with these essential aspects of architecture.

Architecture can be a difficult and daunting subject, but one which can be immensely satisfying and rewarding in both study and practice. The work of the architecture staff and students at Northumbria centres upon critical themes and questions which can be seen to be explored and demonstrated through the work of the final year students.

Central to this work is the philosophy of architecture being fundamentally about people and our interactions with each other within our environments. This translates into considerations of contextual awareness; to be conscious of the world in which we exist and will therefore operate as architects. Architecture is not an isolated object, it is part of a continuum of the physical, historic and cultural fabric of human existence, and it is this foundation which forms the starting point for inquiries within the student projects.

This examination, and the resultant understanding, provides the material by which the narratives of the projects are defined. These themes are then developed through a process of exploring the experiential nature of space as framed by the authentic craft of building.

This iterative design process encourages sensitive, appropriate and considered scheme proposals, which emerge from, and contribute to, the spirit of their place.

Benjamin Elliott : Programme Leader

‘This is a young school which has developed quickly into being one of the best in the country.

The student performance in all respects is excellent. I have been an external examiner in many UK schools of architecture as well as overseas and this school is the most exciting I have seen for many years. I sense that the balance between staff and students is absolutely right the quality of thinking and teaching from the staff is permeating the school with the effect that the student output is remarkably good.’

- Roger Stephenson
part one young lit + phil (the conversation club)

The Young Literary and Philosophical Society will essentially be a specialist library, but it will have a particular theme which differentiates it from the existing institution.

The Young Lit + Phil will provide a place embodying the ethos of the original L&P, but in a more accessible manner, particularly encouraging people to engage with subjects (such as literature and philosophy) who may not have had a chance to do so before.

Community groups from all over the region will be encouraged to use the YL+P as a learning resource, and the YL+P will re-establish the act of thinking and the pursuit and exchange of knowledge as a rewarding pastime, and crucially, as a social experience; the subjects are not ‘high-brow’, but are issues that concern all of us and that we can productively contribute to.

Crucially, the young L&P will be for the exchange of knowledge and the chance to challenge and debate ideas; re-imagining the conversation club.
paul passano

Music Lit + Phil.
sean normington
part one museum

For their major studio project, students were asked to design a museum set in the beautiful rural landscape of Northumberland.

The visitor centre will be a museum and modern-day education centre which will house both permanent and travelling exhibitions, with the focus of the scheme being defined through research into the specific histories of the site.

The centre will also house a small private research unit which will serve those studying the notable and historic sites and artefacts to be found in the area.

The projects will have private and public aspects to the programme, and aspects of the schemes may deal with spirituality, theology, academic history, the creative arts, archaeology, natural history........
part one durham

The city of Durham is one of the most important religious sites in England and a focus for modern day pilgrims wishing to visit the resting place of St. Cuthbert. Known as ‘the land of the Prince Bishops’, the religious centre enjoyed exceptional autonomy due to its geographical remoteness from Westminster.

The city sits in the coal mining heartlands, and yet the industrial revolution had little impact on the physical nature of the city. The first Durham Miners’ Gala was held in 1871 and still remains the largest socialist trade union event in the world.

Durham University, founded in 1832, is one of the oldest in the country, and forms a relationship with the dramatic physical context through a strong history of rowing.
Prebends Procession

‘When one thinks of County Durham the things which spring to mind are Durham Cathedral and the Coalmines.’ (The Coal miners of Durham. Norman Emery. 1992.)

The Gala was the highlight of the miners’ year. From early morning, along the narrow lanes and byways of Durham’s rolling countryside, small groups of miners and their families moved towards the city, proudly behind their expertly painted banners.

On their arrival to Durham City Station, the crowds would disperse from their carriages to unite together behind their respective lodge flag. Together, they would march in the shadow of Durham Castle, and up the Silver Street to the market place, where Gaetomo Monti’s statue of Londonderry, the colliery owner, dominates the space. Banner after banner passed him by on their way to the Elvet and the footpaths were lined with crowds of people, amongst the sound the of the marching bands. On the balcony of the County Hotel, the leading figures of the Labour Party and Trade Union movement would wave to the marchers. Onward the banners and crowds marched to the racecourse, in a seemingly endless procession. When all the lodges were present, the field was bordered with painted, fluttering silk. In the afternoon Durham Cathedral hosts the miners’ service, to celebrate the memory of the local miners and includes the blessing of any new banners.

The proposal involves an extension to the procession. A place for a ceremonial event where the delicate, loved pieces of art are rolled prior to being stored and exhibited for the public. There will be opportunities to socialise and converse, to research and admire, and to remember and reminisce. The proposal will also cater for the conservation of dilapidated pieces and restored banners that date back to 1892.

The site is currently occupied by a public garden that sits within the Cathedral grounds, alongside the city wall. From here many views may be obtained through woodland, to the heavily rowed River Wear that wraps the peninsular. The proposal is sensitive to the sites heritage, dissecting the plot in order to maintain such use.
amelia payton

The proposal is located in Durham, upon the most central and prominent position high above the River Wear. The cathedral dominates the skyline and the steep riverbanks are densely wooded; adding to the picturesque beauty of the city.

The project is based around the monks of Lindisfarne and the journey in which they made to Durham. The history of the present city can clearly be traced back to 995 AD, when a group of monks from Lindisfarne chose the strategic high peninsula of Durham as a place to lay the body of Saint Cuthbert to rest, which had previously lain in Chester-le-Street. From research, records indicate the location in which the monks may have used to cross the river, as shown by an old ford located on an old map found in the archives of Durham Cathedral. Using this as a starting point, six pavilions will be installed around Durham, each looking at a different constraint, focusing on reinstating the notion of a pilgrimage.

Tightly controlled concrete panels combined with natural materials create an atmosphere of isolation and connection to a wider landscape. It is a place of contemplation about the relationship of the modern and the traditional, with concrete providing modern geometry and materiality amongst a sense of rooted continuity.
The Great Northern Coalfield Mining Museum boasts a prominent site in the City of Durham, on the east bank of the River Wear adjacent to Elvet Bridge. The Grade I listed medieval, masonry structure links south-eastern Durham to the peninsula housing the Norman Cathedral, the city's 11th-century castle and Durham University.

Following the tremendous growth of the coal industry throughout the nineteenth and early twentieth century, the latter half of the twentieth century saw colliery closures on an unprecedented scale. Following the nationalisation of the industry in 1947, over the next two decades approximately a hundred North East coal mines were closed often with shattering consequences for small mining communities.

Despite the fact that there are no collieries in the region today, former mining areas retain their own identity and there is still often a strong community spirit associated with colliery districts. The museum aims to cultivate this community ideology by providing seminar spaces for workshops aimed at school children, meeting spaces for associated interest groups and a temporary exhibition gallery.

The Great Northern Coalfield experienced countless mining disasters, resulting in thousands of fatalities. Despite improvements in safety fatalities were not curtailed, with 83 lives being lost as recently as 1981 in the Easington Colliery disaster. The museum pays tribute to the lost miners of the region.
Durham has a rich rowing history, which is still a large and essential part of the city’s culture today. One of the city’s largest events is the annual Durham Regatta which is currently celebrating its 178th anniversary and includes participants from the numerous rowing clubs of Durham University and Durham Amateur Rowing Club.

Currently, the people who row within Durham are those associated with a club and there is a feel that it is closed off to the general public who feel apprehensive about getting involved in the sport as they are not a member of these establishments.

The city would benefit from a centre that would provide the general public with an opportunity to learn how to row without the obligation of joining a club.

This centre will have to include training facilities for rowing, as well as suitable storage for boats to allow visitors to row on the river. Training facilities would also provide the opportunity for private training sessions from other clubs in the city, potentially generating income.

As it is aimed primarily for public use, additional accommodation for regatta events have been included to allow a space for people to congregate.
The site is located in the Historic City of Durham, situated along a horseshoe bend on the River Wear.

Durham riverside is a World Heritage Site and is in strong contrast to that of the busy and bustling streets within its city centre. My scheme is aimed to reinvigorate Durham riverside and to get the public involved in rowing. The site consists of two old boathouses situated on the banks of the River Wear currently in disrepair, which will be transformed into a social hub for rowing.

Two new structures will be inserted above the existing boathouses, remaining detached from the existing building to highlight the contrast between the new and old, whilst an additional two buildings will also be constructed in sequence. As the site is a big flood risk, access to the site is to be provided via a footpath that rises above the existing boathouses; a series of ramps connect to the new accommodation at the 1st floor level.

The building aims to sit quietly and comfortably within its majestic context, as the projects narrative was for the building to be aware that of its presence in relation to its historic context.
Sited on the axis line of Durham University’s Archaeology Department and the most recent archaeological find in Durham Cathedral, the proposed museum houses Bronze Age discoveries from the North East of England, dating from approximately 2600BC to 700BC. A stone wall protrudes from the entrance of the building to emphasise the axis.

The building is split into two entities, linked by a glass canopy, under which is the cafe. The museum displays and protects its findings and a research wing uncovers their original use. A new object is brought for analysis, cleaned, dried, interpreted, and archived. The route through the museum is nonspecific. Visitors happen across Bronze Age vessels, urns and pots, thus uncovering the object and its history. Failure to unearth a certain artefact leaves that piece hidden from the visitor’s experience.

The museum is set to an archaeological grid, replicating how objects are recorded in a certain location when a dig takes place in a field, or elsewhere. For the museum, the grid is laid on plan, extruded up to form the supporting columns, with a deep roof containing various top lit volumes that illuminate a potential route for the visitor. Walking through the building, the visitor can exit out onto a balcony that has views through the trees of Durham Cathedral. The cafe space allows the visitor the opportunity to watch Bronze Age objects being examined and categorised first hand.
There is a significant level of concern about the woodland area that forms part of the Durham Cathedral World Heritage Site, and during 2009 the landowners (Durham Cathedral) commissioned a condition survey regarding the poor state of the woodland. The survey specifically highlighted the unhealthy age profile of the trees, and recommended that urgent action should be taken to ensure that the deterioration of the woodland area was addressed.

The Durham Woodlands Heritage Centre is designed to celebrate the diversity of fauna and flora of this beautiful, but slowly deteriorating natural environment. It will be a focal point for public engagement, education and environmental activity.

The Centre comprises four buildings that are linked by glazed walkways. These provide a defined flow through the Centre, and create a natural sense of walking in the woodland.

The design of the Centre has been influenced by existing established trees. Its construction will only use felled timber, quarried stone, and local materials for the rammed earth walls taken from the wider woodland management programme.

The Durham Woodlands Heritage Centre aims to increase awareness of the importance of the woodland and its preservation.
Kimia Benam

The Riverbank Gallery and Artist’s Retreat, faces Durham’s most iconic view towards the Cathedral and the Old Mill. The views of the Durham peninsula and its surroundings are a canvas to capture. The Riverbank Gallery and Artist’s retreat is a place to create an enjoyable experience for the artists and the public, and to discover creativity within the historic context.

The building has framed the most stunning views within the gallery spaces, making the views part of the exhibition display. It also provides networking environment for both local and visiting artists, with over night accommodation.

This preserved site is situated at the top of the riverbanks and is protected by a retaining stonewall which divides the nature from the manmade world. The building’s heavy concrete blocks are to resemble buttresses, which appear to be pushed back against the stonewall. In between the concrete blocks there are lighter spaces joining them together, making each room a different event from the previous. These spaces include a series of galleries and studios linked by a circulation route clearly defined through the building.
The Weaving Works Museum

Set on the edge of the River Wear’s peninsula in the heart of Durham, the chosen site relates directly back to Durham’s history of exportation and importation of fascinating goods. Highly famous for its creation of tapestries, carpets and woven artefacts, the site sits amongst vast larch tree trunks that intertwine amongst one another, directly portraying an image of woven structure creating my design concept.

The proposal of the museum is to interlink the current stone boathouse that sits on the site, with a ‘new’ woven building. The implementation of ‘The Weaving Works’ celebrates the past traditions and memories of the weavers of Durham, over one thousand years ago. The main aim is to create an environment that serves as a reminder, by displaying and exhibiting new works of the weavers and old artefacts from historic times.

Visitors are drawn into the building from the highest pedestrian path level and progress downwards to riverside level on a woven journey and into external environments for external exhibitions. Durham Weavers Guild’s members function in the building with private areas for members to work day and night.

The building is constructed of brick, timber in the form of a steel frame structure in response to flooding levels. The timber façade with adjustable louvers is linked to its surrounding tree materiality and allows light entrance into the south façade as well as allowing constant views out to the surrounding river.

Various walkways, hidden paths and cuts are present in the structure, linking small enclosed areas to one another, relating back to dull, damp and cramped working conditions present in Durham’s textiles industry.

lucy hillier
For the majority of the twentieth century, mining was the staple industry in Durham, forming the core strength of the community in the Northeast. Many owed their existence to this dangerous profession, which came to be celebrated through an annual gala in the late 1800s. 'The Durham Mining Gala,' takes place every second Saturday in July despite no deep coalmines remaining in the region. Its one hundred and twenty-six year history is honoured as a celebration of the working-class and a tribute to those who lost their lives in the mines. Currently, the banners displayed at the gala can be found throughout England and beyond, often being kept under unsuitable conditions. No building currently exists with the primary purpose of holding and maintaining the banners in an appropriate and respectful manner. The aims of the 'Mining Gala Museum' include displaying, conserving and storing these historic banners. It is located a short distance from the Cathedral, where they are blessed as part of the precession.

The banners will have the appropriate means to be displayed in the three known ways; behind protective glazing, laid flat and free hanging. The black brick slip clad buildings in which the banners will be housed will have strong visual links to the form of mining institutions and bath houses in which the miners where regular occupants. The visual story that these banners tell is an important part of the city's history and through the "Mining Gala Museum" this will not be forgotten.
The Pearl Bordered Fritillary Butterfly has seen an 87% decrease in its population in the North East as a consequence of substantial deforestation. Thriving in habitats of forest clearings that provide beds of bracken and marshes on which to lay their eggs identified the specification for a suitable location. This would become the site on which to re-grow the population and implement the regeneration scheme.

The woodland centre aims to raise awareness of the species and re-establish a habitat on the bank of the River Wear set back behind a line of established trees. The site will be enhanced by planting indigenous species of flora both around the site and as part of the building, in the form of sedum roofs and a living wall with the aim of attracting the butterflies and the bees to sustain the habitat through natural pollination. Eventually both man and nature will be seen to coexist in harmony.

In conjunction with the National Trust, Habitat Surveillance Specialists and Water Conservation analysts monitor the environment to ensure the equilibrium of this river cycle is maintained at optimum conditions for the fritillaries and other wild species.

To educate the public about their surrounding environment lectures, temporary exhibitions and nature trails are implemented as part of a fun way of learning for all the family on a day visit. In consideration of the life cycle of the scheme, a number of the structures are temporary their ability to be disassembled will leave little trace of their existence on the landscape, leaving only a few facilities for the public when walking around the peninsula of Durham defining the meadow clearing as a public realm an encouraging regular visitors and tourists down from the town.

The centre is clad with reclaimed timber larch boarding and touches the ground lightly on a series of stilted legs imitating and blending into the established woodland backdrop. A framed boardwalk stretches across the site providing a climbing frame round which creepers can grow eventually shrouding the building in vegetation.
part one kielder

Kielder water is the largest artificial lake in the United Kingdom and is surrounded by Kielder Forest, the largest man-made woodland in Europe.

This artificial wilderness is home to a variety of rare species of flora and fauna, it has the darkest skies in England, a world renowned art + architecture initiative and England’s largest hydro-electric power plant.

But the addition of the forest and reservoir now cover a more ancient history, from the numerous bronze age settlements, to the bloody skirmishes of the border wars, to the mining and quarrying industries.

The area is also rich in ancient mythology and folklore, and there is an air of melancholy after the displacement of the people of the Kielder valley to make way for the water.

CHRISTINA DIXON, DARREN ROBERTSON, JAMES VAN GEFFEN, KIMBERLEY WHITFIELD, LAURA BROWN, MARK EVERED, PAUL PASSANO, PHILIP KNOX, SAM LEDGER, SEAN NORMINGTON, SIMON LILLYWHITE, SIMON TAYLOR, RICHARD BADDELEY

PHOTOGRAPHS: BEN ELLIOTT
By the middle of the 16th century the border reivers had become a way of life in Northumberland. It was therefore necessary to build as highly defaceable houses as possible; these were known as Peel towers and Bastle’s. The border reivers museum illuminates these local ruins by providing a place of warmth, activities and information on artefacts within the building. The site in which the museum is located provides a connection between local Bastles on the border reivers trail.

The design of the border reivers museum draws influence from the existing Bastle Black Middens, which helps to inform the language of the museum allowing it to sit honestly within its surrounding context. The concept of the museum is based on four Bastle’s integrated together to form the design of the building.

A bastle is traditionally a residential structure, which is predominantly two stories high, to provide for farm animals at ground floor level and domestic accommodation above. The plan of the museum has taken this into account and has provided accommodation for six at the first floor level with the services and museum space at ground floor level. The windows in the Bastle were generally small cuts which are exaggerated to form sharp slits in the museum to symbolise the conflict which was once there.
This scheme explores the harshness of coal mining, its industrial materiality and the impact of its embedded nature on the environment, which leaves sizeable scars within the landscape.

Sunken beneath Kielder Forest and Reservoir lies Plashetts, the home to an historical past brought about by mining. Before it ceased to exist, Plashetts formed an important node in a coal transportation line which ran across Britain.

Through the years the area has lost its knowledge of and connection with its coal mining past. The Museum and Visitors Centre inspire a much needed desire for this history to be re-established within the local area.

The Museum, an embedded pathway, flanked by large corten steel walls, borders the old Plashetts drift-line, taking you on a journey exploring the history of mining through the years. 6 different shelters are realised along the way concluding with a visitors centre perched at the top.

Each shelter displays characteristics of mining, a miner’s life and how mining changed with the impact of the industrial revolution, politics and technology.
Kielder Nature Hub

Kielder Forest has a vast range of environments, from woodlands and grasslands, to bogs and water habitats. This variation provides a home for a wide range of wildlife throughout the National Park.

Kielder Nature hub provides visitors with unique facilities to experience the local wildlife and habitats. Elevated above ground level the building sits delicately and sympathetically in its environment, leaving the habitats untouched.

The main hub provides visitors with warmth, shelter and shade throughout the extremes of Kielder’s ever changing conditions. The public area provides visitors with information to help orientate and guide them around the hubs three look out pavilions. Whilst the private area provides accommodation and a research facility for small groups of students and scientists undertaking field research.

The three look out pavilions are situated in the sites unique habitats and are specifically designed to provide visitors with an intimate viewing experience of the local wildlife.
The Museum of the Border Ballads

Kielder today is a place of tranquillity, however its local history is very different. During medieval England Kielder’s location only a few miles from the Scottish Border meant it was home to the ruthless, unforgiving murderous Border Reiver families, whose life depended on stealing the livelihood of other families. Although these families are seen as despicable members of history they were also beautiful poets, and the stories they left behind have given the knowledge of their past to present.

This museum acts as a marker in time, preserving the stories and characters of the Border Reiving past so they will never become forgotten, passing them down to a new generation. The museum is not contained within one building but allows a journey into Kielder’s beautiful landscape weaving its visitors up to the lonely moorlands and to the peak of Deadwater Fell. The journey begins with an existing stone sheep house where a map can be picked up, which highlights the position of three pavilions each representing a different border ballad that bares a connection to Kielder. On completion of the journey the visitors descend back to the place they began and enter the main building a protective stone shelter reminiscent of the peel towers that became unique to the border regions during this period. This is a place where these stories come to life and where rooms are provided to rest weary legs after a day of walking. The museum encourages its visitors to live like the reivers – exploring the landscape during the day and retiring to their protective shelter to the entertainment of the Border Ballads.
laura brown

Situated in a paradoxical rural landscape at the height of both cultivation and wilderness, Kielder Forest interweaves the rich tapestry of mythology rooted in the area. The legends of the living now exist only in the memories of the individuals who lived here before the plantation of the trees and the creation of the reservoir that resulted in the ruin and removal of many valley hamlets. As the population grows old and moves on, the stories of the past have become lost and forgotten.

The museum unearths the lost history of Kielder, not by artefact but through storytelling and experience. Centred on the idea of journey, it is respectful of the elements; the beauty of nature, the connection between man and earth, and the notion of self-discovery.

The concept of feud and fusion across the Scottish border has emerged as a key design concept. Many stories of the past speak of conflict and contradiction; separation and homecoming, good and evil, sin and virtue. Synonymous with the fundamental enigma that embodies the forest, it amalgamates the natural and the synthetic; connecting man and beast, heaven and earth, and the mortal and the divine.
The Border Conflicts Museum is centered around the Medieval history of the area. The museum is split into three parts consisting of an education space, a replica exhibition and a Medieval artefact display. Placed in the area where the Scottish army would have camped on their march, the site lies upon a prominent hill overlooking the Kielder reservoir. The design is drawn from the prelude to the Battle of Otterburn. The main tower representing a Pele tower with the auxiliary buildings hinting at the temporary shelters erected around it in a defensive position.

Constructed with a thick double cavity wall, the polished granite tower with accessible roof provides a quiet haven from the blustery hill and overlooks the smaller timber buildings. The locally sourced Sitka Spruce timber construction is used sparingly and creates a change in atmosphere as the visitor passes to and from the tower.

On such a barren and exposed site, the Museum provides sanctuary. The visitor leaves the car park and views the museum through the trees. Passing into the sheltered courtyard they are faced with a quiet and serene area to gather themselves before entering the reception where they can place unnecessary items in the cloakroom. After following the journey of the museum they arrive at the café which serves locally sourced and freshly prepared food and drink. The café also serves as a restaurant during the museum closed hours.
Kielder Scouting Visitor Centre

In 1908 the founder of the Scouts movement (Sir Robert Baden Powell) held the first official camp for boys at Humshaugh, Northumberland. The success and experiences of that initial camp led to the publishing of his book "Scouting for Boys," which achieved national appeal and the progression of the scouts movement to reach the current 50,000 + members. Despite the significance of the North-East in scouting history, the only existing memorial is based in the centre of London.

The site is situated on Kielder Water which is the largest man-made lake in Northern Europe and is surrounded by the largest working forest in England. It is located 6 hours walk away from the original Humshaugh site. The Hawkhirst Scouts own 17 acres of Kielder Forest and regularly camp in an opening in the woods just north of the site. The reservoir is also surrounded by a continuous path called The Lakeside Way which crosses over the site and vaguely disappears into the forest.

The pilgrimage from Humshaugh to Kielder is combined with the visitor’s path and defined by shelter like buildings. Embracing the landscape and the elements, an opportunity arises for anyone to gather, learn and experience the spirit of scouting.
The site for this project is located right next to the Kielder Viaduct, which was the main transportation link for distributing coal which was mined near Plashetts, a site where the museum can bring back to life the mining heritage of the area of Kielder.

As of 1926, the mines began to close due to the great striking, and flooding of the mines making them too dangerous to work in.

Plashetts is now a village lost completely under Kielder Reservoir. The only part of the mining history, the workers and the families of the area, is the viaduct hidden away in the trees, the rest of the heritage lies under layers of soil, planted trees and the Kielder Reservoir.

This museum aims to unearth the history, the beauty of mining, providing prosperity and joy to the people, and also the horrors which it created. The building is a stand out icon with the mining chimneys, reaching out of the ground towards the fresh air and will trace back the life and experiences of such an industrial business in an open wilderness.
Sam Ledger

Sitting just of the boarder of Scotland, Kielder gives you every possible sense of wilderness as you arrive into the ever expansive depths of the largest man made forest in England, Kielder forest, whilst being able to enjoy incredible views created from every possible angle, looking across the largest man made lake in Europe, Kielder Waters.

The museum works to explain why Kielder is actually here, by primarily displaying examples of its biggest source of industry, coming in the form of forestry, whilst also making vast connections back to the areas of rich history also present all over the area.

Structurally, the building is designed to have an industrial feel to it, with connections back to forestry machinery in both colour and materiality, whilst also being delicately placed on the land, and submerged between the trees, so to cause as little environmental and aesthetic disturbances as possible.

The main spectacle that is created around the exhibitions, that is extremely hard to ignore, is how the building is adapted to frame a number of awe inspiring views, whilst also completely engulfing the whole structure with connections to the external atmosphere of Kielder.
sean normington

Under the surface of the enormous expanse of water at Kielder lie the memories of thirteen villages. In the late 1970s over four hundred families were displaced to make way for two hundred billion tonnes of water, forming the reservoir we see today. The scheme provides visitors with the opportunity to learn about and reflect on the lives, history and forced movement of the people of those thirteen villages. Visitors arrive by foot to three concrete experiential spaces. The first of the three is sealed from the elements, introducing visitors to the history of the farming, mining and forestry of the region and its former residents. From here, they can walk along a lakeshore path to a second space. A stepped lookout point provides a glimpse of the surroundings whilst a galvanized steel walkway sparkles like the salmon upstream and disappears into the water, reminiscent of the many disappearing roads around the lake.

The final concrete structure, sitting in excavated land allows users to experience the lake at eye level. An unglazed opening means that water level can rise and flood the steel clad internal space. The 500mm thick concrete walls give an impression of enclosure and safety upon entry, before the vast open space outside is revealed and framed. Further back from the shore, a series of simple timber buildings are masked by trees. This structure provides the support facilities for visitors. Sitting gently on the ground and lying with the contours of the landscape, it anchors the scheme back from the shore. Out on the lake, markers of light serve as an ephemeral memorial to the thirteen lost communities.
Kielder is a peaceful and tranquil part of Northumberland; but it wasn’t always so. Between the 13th and 17th Century, this area situated close to the Scottish Border was all violence and misery. To steal and kill was the only way to survive; the people involved became known as the Border Reivers.

‘A profession to be admired, a way of life.’

The site is situated on the legendary road called the Bloody Bush that leads to a famous skirmish that occurred on the border. The route is now a popular walking and cycling track that is said to be haunted and not to be attempted after dark. The borderland still has archaeological remains of old Scottish Brochs and the Bastle houses used for protection in the reiving times. The fortified walls were made of stone ranging from 1 to 1.5m thick.

Inspiration for the museum design lies behind these layers of history that have built up over the years. The thin timber slits set within the heavy stone walls encourages the visitor to explore what is within. Once inside, natural light spills down small gaps between the exhibition pods. The circulation around the building is simple offering a walk through the life of a border reiver, including artefacts and video rooms providing a glimpse of the brutality of the times. This is a journey, an experience of how our ancestors lived.
Kielder Astronomy Centre

In Association With Kielder Observatory

With Kielder observatory providing for professional astronomers, and James Turrell’s Skyspace engaging amateurs with the night sky, the Kielder Astronomy Centre aims to take those interested in the night sky and take that interest to the next stage, so they are able and ready to participate in the Kielder Observatories weekly Dark Sky events.

The origin of the design originated from the rotation found in star maps and the observable universe, everything has a centre of gravity, as does this design. The focal point in this case, a useful tool for teaching astronomy, the planetarium. From this focal point, sectors, like on a star map present the views to the night sky, the segments that manifest themselves as telescope like structures protruding out to give framed views of not only the night sky but the beauty of Kielder.

The navigation of the telescopic tubes also, like a star map, is arced along a walkway through the woods on which the buildings intersect it giving the viewers the opportunity to move down and open themselves up to the landscape.
Kielder Park Astronomy Museum and Learning Centre

For thousands of years humans have wondered about the cosmos, its place within our world, and the unique proportions which come about because of it. Staring into a clear night sky when nothing is around but nature to disturb you can give you a real sense of scale to our size within the universe. Kielder has the darkest skies in England, which is why it is perfect for people use the observatory and look into the heavens.

The current observatory currently does not have a public sector designed to be open throughout the week where individual and groups of the public can go to learn about the solar system, how to use a telescope, and see the amazing photographs which have been taken from the observatory. By using theories of proportion used by people like Da Vinci and other philosophers who are trying to find the link between our human forms and the gigantic forms of the planets, the new astronomy museum posses the ability to teach stargazing skills, and has real meteorite samples for people to learn from.

By following the journey through the cosmos which is created it finally leads out to the planetarium, which is thrust into the landscape like a huge meteorite which has fallen to Earth. In here scheduled shows and lectures can be given, so that by taking real-time and animated shows, the link between humans and the stars is made stronger.
part one rothbury

The market town of Rothbury lies in the Coquetdale valley in Northumberland.

The wild landscape around the town is littered with evidence of prehistoric activity, including bronze age hill forts and neolithic cup and ring marked stones.

Cragside, the former home of Lord Armstrong, lies on the outskirts of the town, and provides a remarkable past including the world’s first hydro-electric power plant which was used to power one of the first houses to be lit by electric lighting.

BEN LILLYWHITE, CHRIS DRYSDALE, CLAIRE RAFTER, HOLLY JANE BARKER, LUCY FURNISS, MICHAEL OWENS, ROSS SANDERSON, SAMUEL SEDGEWICK, SOPHIE PARKER, TOM MCKENDRICK, WEI GONG

PHOTOGRAPHS:
LEWIS PRESTON
St Oswald Visitor Centre and Overnight Shelter

St Oswald is a historic figure in both Northumbrian history and Christianity. Recognised as being the first king to truly bring Christianity to the country, King Oswald was also known for bringing the Northumbrian region into prominence.

In honour of St Oswald and his achievements, St Oswald’s Way was developed by Northumbria County Council; a 6 day, 97 mile walk passing by several significant points of interest regarding St Oswald, beginning at Lindisfarne and finishing at St Oswald’s final resting place, Heavenfield.

Rothbury lies at the natural stopping point of day 4. The accommodation building is set along the walk itself, high on the Simonside hillside, acting as a beacon for the travellers reaching the site, before providing a beautiful viewing platform for day 5’s walk. Continuing down the way, you reach the Visitor Centre. The Centre provides information of the walk itself; St Oswald, his history and influences; information of St Oswald’s hospice and a gathering point for people coming to the area for a day’s walking.
Lordenshaw Hill Fort Visitor Centre

Lordenshaws Hill Fort is situated 2 miles outside Rothbury in Northumberland. Lordenshaws Camp is one of the finest examples of an Iron Age Hill Fort in Britain today. The Earth works that were once the defensive walls of the Fort, are still visible though they are much smaller than they once were. The fort sits at a height of 260m at the top of the mound.

There were once two watchtowers in connection with the fort situated in the surrounding area. One to the East on top of Garleigh Hill and one to the South on the highest peak of the Simonside range. The building is located on the top of Garleigh Hill due to its strong connection to the Hill Fort and because of the great views that are captured of Rothbury and the surrounding coastline.

The concept behind the building is related to the axis which can be drawn through the West and East gates of the fort. The building is orientated perpendicular to this axis line and a scaled model of the fort is also located upon it within the building. The building has been sunk into the ground to create a protected feeling for the users, much like the protection that the Earth walls of the original Iron Age Hill Fort provided. Large Gabion walls have been used as retaining structures utilising rock from the site excavation.
Simonside Hill Range, Lordenshaw, Rothbury

After the discovery of the Beacon Solar Observatory on the Simonside Hill Range in Rothbury, the National Trust set a brief for a new Visitor Centre/Museum to be built nearby. The centre was required to present the links between Neolithic structures and astrology. The Northumberland Astronomical Society were also involved, whose aim is;

“Promoting astronomy education and encouraging people to look up since the year 2000”.

The museum will present the development from ancient monuments to modern technology, as well as photography taken by local stargazers at their observatory.

The Beacon Solar Observatory is located on the Eastern most hill of the Simonside Hill Range. It is an arrangement of fell sandstone rocks, some argue in the formation of a pagan cross. At the centre of the arrangement is a four tonne rock named the Central Holed Stone. The hole has been mysteriously carved through the centre, and the compass points show that it has been aligned with the summer and winter solstice of the sun. There are several alignments as the rocks direct your view to observe the equinox sunrise over the horizon of the sea.

This led to the museum being aligned to the North-West; this created a journey, leading the visitor from the entrance through the exhibition spaces, taking them to an outdoor path continuing to the rock formation.
A century ago Lord William Armstrong carved from the landscape five lakes. The power generated from the torrents cascading down the waterfalls created by the steep and rugged landscape was harnessed to power the first house powered by electricity.

The visitor centre is dedicated to Armstrong’s ethos of utilising natural methods within construction and technology; it houses the original turbine which powered Cragside House. The form of the building challenges the vertical and horizontal planes of the landscape. It sits at the source of the Debden Burn at the foundation of Armstrong’s legacy. The building utilises modern methods of Hydro power, allowing for the museum itself to become the exhibit.

The tower, engulfed within the forest provides an area of shelter for hikers. The silence of the site allows for the steady trickle of the burn to be heard above the calls of the birds nesting in the overhead branches which reach into the structure. The delicate construction of the tower allows for the rain to penetrate the perforated staircase allowing the occupant to experience the feel of the water. The treated timber posts and beams absorb the water to produce an earthy smell. A pier reaches out from the tower to a bunk house which floats elegantly above the lake. It disintegrates as it protrudes further over the lake. The bunk house must be reached by boat.
“There is something fascinating about creating something living out of an inanimate material.” - Nicolaus Widerberg

Glaciers and water have carved and shaped the landscape. On a smaller scale, Neolithic man has carved markings into the outcrops of rock in the area of Lordenshaw, also altering the landscape.

The museum and visitor centre explores man using the landscape as a material for sculpture; and the sculpture then being returned and exhibited in its natural environment. The cup and ring marked rocks serve as the permanent exhibition, which is to be explored through each visitor’s own interpretation of the journey, guided by a single marker at each rock.

Contemporary sculptures are to be explored in the area around the visitor centre, and are positioned at certain points that would have held importance to Neolithic man, such as the angle of solstice and vantage points.

The visitor centre provides shelter in an exposed environment. The natural materials evident in the building, stone and wood, will weather and express their age and history, as well as tell the story of their origins and their history of human use. The museum will be rooted within the landscape like the rocks present at Lordenshaw, which will continue to exist for another thousand years.

The bunkhouse is a separate element to the visitor centre and represents the moraine left by the retreating glacier. Sculptors are welcomed to stay overnight and experience the dynamic nature of Lordenshaw.
Cragside Studios

The studio offers an educational programme and overnight accommodation pods with the intention of promoting the exchange of architectural knowledge and skills through experimentation and direct experience. This will provide a base for architectural students, practicing architects and a wider audience with an interest in place, landscape and the direct experience of making and working with materials to hand.

Due to the site being compact with picturesque views of the Tarn Lake, the studio has been placed in the corner of the site with the accommodation pods being tucked into the forest line to maximise the views onto the lake. With the placement of the building, added space gives the opportunity for construction to be handled outside the workshop in the summer time, whilst still having access to tools needed to craft.

The main strategy when using Cragside studios is to find a site of fallen trees nearby. Design your response in the studio area, and then proceed to construct it using the large workshop area consisting of all instruments needed to get you by. When your response to the chosen area is completed, it is then installed close to the original source of timber. Making the most of the materials and conditions that the forest naturally has to offer.
"The Museum is a projection of a journey we take as explorers, bridging and crossing the line where one has not been before."

Lindsay Allason-Jones, Director of Artefact Studies, Newcastle University

In 2005 Coquetdale Community Archaeology was launched to explore and investigate the archaeology of upper Coquetdale, to tell the story of life in the hills and plains of the river Coquet that flows through the landscape of Northumberland.

Community is key to the success of the project, allowing people to participate in organised field walks, excavations and events. The landscape around Rothbury is rich in significant history, including extensive Neolithic, bronze age and roman sites, 20th century military archaeology - exploring the legacy of two world wars, as well as the influence of Cragside and Lord William Armstrong.

There is a real need to house the Coquetdale Community Archaeology society as well as to provide information on, and a home for, the artefacts found in the area.

Surrounded with historical interest the location of the museum provides a 20th century addition to the local landscape, thus beginning to write its own history.

The museum creates a permanent footing and focal point. The series of buildings stand firm within the landscape, a modern day extension to the crags opposing Thrum Mill.

Communities grew up along the river, the buildings follow the course of the river Coquet paying respect to the power of its influence in the landscape. Cor ten cladding is used as the oxidized steel creates a strong connection with the water. The building is exposed to the elements but creates its own barrier through oxidization. The industrial characteristic of the material has strong links to Lord Armstrong and his engineering triumphs. The Museum is powered by hydroelectric power from a water wheel that will be installed in the refurbishment of Thrum Mill. A weathering steel bridge guides visitors from the main road into Rothbury over the river Coquet, making this once hard to reach piece of land accessible to explore.
Rooted in the rich and beautiful context of the Northumberland countryside the centre strives to rejuvenate the dying art of crafting a Northumbrian small pipe, in an area once home to James Allan, the first Northumbrian small pipe craftsman. A journey of reward and denial is born out of the heart of the local community in the town square, where only a stand alone cherry tree is visible from the distant horizon. Heading south, locals and visitors together embark upon a journey crossing boundaries and barriers of new and old, which encapsulates a number of ephemeral events and culminates them into one rich memory. From the tactile qualities of the local weathered sandstone walls, to the smell of burning leaves in the immediate allotments and the distant murmuring of a bagpipe being tuned, the journey is by all means multi experiential.

As the visitors reach the top of Whitton bank and conclude their journey, the roof form and use of vertical charred timber battens are reminiscent of the local vernacular farm barns, helping to celebrate the frequently overlooked qualities of a field alone and the diminishing cherry and pear trees. In pursuit of this continuum of culture and realisation of timber craftsmanship, the local and wider community are held at the forefront of the centre. Members of the local Rothbury pipe band and town are given opportunity to pass on their knowledge and wisdom in crafting a pipe to younger generations, whilst regional sculptors that celebrate traditional timber methods are exhibited in the temporary exhibition. Stories of the pipers such as their volatile past with the Border Rivers and Jacobite, attempts are told around the comfort and warmth of a hearth. Visitors are then granted the opportunity to plant their own cherry or pear tree, sustaining the trade and with it the regions authentic sound.
sophie parker

Lordenshaw Rock Art Centre

Situated amongst the prehistoric rock art in the wild open landscape of Lordenshaw, near Rothbury, the rock art centre marks the beginning of a journey where the landscape is the exhibition.
“The climb at Simonside on a summer’s evening is to experience Northumberland at her best.”

Located just outside of Rothbury in the heart of the Northumberland countryside, the Simonside Crags are one of the more popular climbing spots in the area. The surrounding panoramic views, ease of access and array of different routes to be climbed mean that Simonside is visited year round by both climbers and walkers alike.

The scheme looks to incorporate a rock climbing centre, cafe and exhibition space that can be used by all ages to explore the local surroundings and history.
Interpretation of William Armstrong

These images portray a scheme for a visitor centre in Rothbury Northumberland that would house the engineering triumphs of Lord William Armstrong. Visitors would be able to gain knowledge and understanding and experience the process of hydro power generation from a water wheel integrated into the design to take full advantage of the river location.

Following the research of William Armstrong in past time what he has a rich history about hydro generation, armaments, warships, wrought iron, landholding…

There are many estates belonging to Armstrong in the Rothbury and he built the first hydro generation house Cragside. Thus, Armstrong and his cultural heritage attract large amounts of visitors every year. However, some heritage of Armstrong has gone. For example, the Cragside House has stopped the use of the Hydro generation to power the building and the arc lamp was replaced by the incandescent lamp.

The visitor center aims to make an integration of the culture heritage of Armstrong which could support an opportunity to introduce a detailed history of Armstrong whilst at the same time the visitor will be able to obtain a coherent knowledge of the hydro power generation. On the other hand, it will be a great way to reproduce and interpret the whole life of Armstrong from early life to later life by either the film in the theatre or information within the exhibition area.
part one south shields

South Shields has a strong industrial heritage based on mining and shipbuilding. The decline of the industries has had a significant impact on the area, visible in the disused sites along the river and seafront.

The area also has a significant Yemeni population stemming from the late 19th century, when the Merchant Navy was bolstered by Yemeni seamen. This is thought to be the first settled Muslim community in the UK, and gave rise to the first mosque.

Fishing, salt panning, Roman settlement, Viking raids, border wars and significant habitat for rare species of plants and seabirds along the coastline give the area a range of potential themes for a museum or visitor centre.

ALAN GOURLEY, ALBERTO JIMENEZ, ALAN LAWSON, AMAN SANGHA, CHARLES PICKARD, JAMES BARNES, JOSEPH WARNER, KAI HONG, KENT CHEW, PETER NOEL, RUHEL HANNAN, THOMAS SYKES, TOM PARRISH

PHOTOGRAPHS: SEBASTIAN MESSER
During WWII, South Shields was susceptible to numerous air raids due to its reputation of being a large shipbuilding industry and supplier to the navy. As a result a large coastal gun was placed just south of the docks in an area known as Trow Quarry, in order to protect the town.

The site located at the quarry, provides various rough conditions through strong wind, heavy rain and crashing waves.

The concept of the building is to lead the viewer on a journey through WWII in South Shields via information boards and observing exhibits. Then through dark experiential spaces, utilising the harsh conditions of the site, the visitor will feel firsthand the cold, chilling effects of war.

The design is based upon coastal bunker technology which uses thick concrete walls for stability and provides maximum views through limited slits.

The design will cause confusion and disarray, replicating the war, as people become lost within the walls and spaces. Then following a ramp, the visitor will be taken on a journey to the main exhibit - the existing gun. The ramp will wrap around the cliff with views out to sea, before emerging on the guns’ axis.
Situated to the south of the river Tyne, South Shields has gained the image of a gritty northern town. The history and importance of the South Shields mining and shipbuilding industries has been well documented and as both of these have slowly declined. But South Shields has a secret. Hidden behind the industrial exterior is a selection of rare birds, plants and an even rare environment. The coastal area attracts a variety of unusual bird species, some of which are on the brink of extinction and brings together ornithologists from all over the country. This new visitor centre provides shelter from the harsh coastal winds and a comfortable environment for bird watchers to spend their time studying these animals.
A conservation and visitor centre situated on the coastline of South Shields Northeast of England, will provide coastal village information and guidance about the North Sea and its important contribution to biodiversity.

This building will offer people a connection to nature, as its location is in this idyllic place where the beach and main land meet.

The aim of this project is integrating the community through education and learning, which is reflected on the arrangement of spaces on the plan, where the main space can become a series of independent and versatile areas depending on the occupants needs, in order to achieve this the building provides sliding panels that allow spaces to become larger or smaller.

The design of the North window allows people to rejoice with views of the sea without getting disturbed by its reflexion on the glass due to the angle of the external wall, a bench is located along this glazed façade delivering a comfortable seat for people to look and have an agreeable moment.

The North Sea is home to a fantastic array of marine life from coral beds to big mammals like whales.

“Currently only 2% of the English North Sea is considered as partially protected and only 0.009% fully protected” www.northseawildlife.org.uk

Also the North Sea is one of the busiest seas and is home to a range of human activity making many important, rare and threatened natural habitats vulnerable.

These are some of the reasons that people need to know about in order to help and protect the sea: pollution, destruction of fragile habitats and wild life, over fishing, how climate change affects sea levels rise and changes in water acidity.
aman sangha

Yemeni Museum

South Shields is situated on the south banks of the Tyne where the river meets the mouth of Pow Burn. In 350AD South Shields was used as the gateway to England and as a result the Arbeia Roman fort was built and became the starting point of the Hadrian’s Wall. The town of South Shields came into existence in 1225AD when the pier of Tynemouth was home to fish quays and ship building.

Around the Victorian era the coal industry in South Shields expanded which led to the rise of the population and established the town as a prospective and promising place for employment and trade. As the shipping and mining industry was booming in the late 1900s, South Shields became a prominent work place for the Yemeni Community as they arrived by boats to supply seamen for the engine rooms and firemen for the British merchant vessels. The Yemeni workers were also recruited to serve Britain in the First and Second World War.

The museum aims to create an environment where the history of the Yemeni’s achievements can be displayed alongside the aim to emphasise their rich culture within South Shields. The museum is to educate the locals of South Shields about the background of the Yemeni’s. The museum aspires to fuse the hidden Yemeni’s community together with the local sand-dancers (locals of South Shields).

The inspiration of the location for the museum came from the timeline which is painted on the South bank wall which shows historical events that have taken place in South Shields. The museum lies above the wall which reflects the forgotten Yemeni’s history in South Shields.
The craft of shipbuilding is the Heritage of South Shields. The Maritime Trust works to preserve this craft which could have been lost to the winds of time. The Shipbuilding industry was once such an inherent part of everyday living in South Shields, it would only make it right to have a place to commemorate the past and teach these skills so that they are never to be forgotten.

The Middle Docks are the biggest docks this side of the River which have seen the great success of the tremendous industrial triumphs of South Shields building boats that have sailed the world. Breathing life back into this graveyard will open the visitor's eyes before they enter the Museum, to the scale of work and part that South Shields had to play internationally in Shipbuilding.

The Maritime Trust Relocation and Educational Programme need new facilities as part of the Museum. On entering the building the interior tells of its nautical traits in construction in materiality, techniques and tension structure.

The Museum Works in three sections; the Workshop where visitors can learn from hands on approach and help with boat revival projects or just view the work from the wings or gantries.

The Middle section holds the permanent collections and classroom for further education as the museum will be run as an educational facility in part with local colleges. Finally the Cafe for temporary exhibitions and somewhere to relax.
It became immediately clear that the history of South Shields is deeply rooted in the shipbuilding industry of the nineteenth and twentieth century’s.

Scars in the land are still clearly visible across the whole town, but the recent history of shipbuilding seems long forgotten.

This museum aims to not only display tools and artefacts of the era but to recapture the impact it had on the community.
Life saving has always played an important part in the history of South Shields. The first purpose built life boat was designed and built in 1791 by Henry Greathead. In South Shields life saving was provided on three fronts, the RNLI, the volunteer life brigade and the shields life boats.

The building acts as a link between the land and the sea; this is to represent how the RNLI act as a link between sea and the land for people lost at sea.

The walkway in the building helps to link the museum to the other lifesaving structures in the mouth of the Tyne.
joseph warner

A Glass Blowers Domain

“We all know how ships are born, how majestic vessels are nudged into the ocean with a bottle of champagne. But few of us know how they die. Hundreds of ships meet their death every year. From five-star Ocean liners, to grubby freighters, literally dumped with all their steel, their asbestos, their toxins on the beaches of some of the poorest countries in the world. With the smoke, the fumes, and the heat, it could be as close as you’ll get to hell on earth.”
- Bob Simon, CBS News, on 60 Minutes, November 2006.

The decline of the shipbuilding industry along the river Tyne has left the once proud town of South Shields with some of the highest unemployment rates in the UK.

My current project involves looking at how asbestos within redundant ships can be recycled into glass, through thermal decomposition. Taking a harmful and worthless material and transforming it into a beautiful object, through glass blowing.
The Glass Blower

“By the red furnace stands,
Apollo mute,
Holding in upraised hands,
His iron flute.”

Jan Struther
South Shields is one of the largest industrial areas of the last century. During the industrial revolution, the rise of the ship industry let South Shields become one of the important shipbuilding places in UK. Although the shipbuilding is gone today, it still can be seen along the river.

The site was a shipbuilding factory in the past, and was the first of its kind within the area. The site itself is already an artefact within the area.

The concept is to let the site be part of the exhibits, import a new architecture beside the site, and bring the visitor into the site via the new pathway.

Based on the history of the site, it has been divided in a few different zones, which are respectful of its old functions. Each ‘zone’ will have its own activities and let the visitor understand the history of shipbuilding today.

However, the visitor centre will be split in the site and become part of the journey while the visitor is walking into the site. They are actually learning and understanding about the shipbuilding development along their journey while they are walking on the ‘pathway’.
The site is located in South Shields, Newcastle Upon Tyne, United Kingdom. The rich geology and history around the area in which the building is sited leads towards a design that exhibits both the existing landscape and the various types of rocks that are present. Investigative studies of the solid earth and the processes by which changes occur in the formation means that the building will function as a geology research centre as well as being a visitor centre.

Sea water erosion has been a serious issue along the coast, it retreating a meter of land every 5 years. Thus the building is designed as a barrier to prevent the erosion from occurring. The purpose of the building is to study climate change. Many existing rocks on the site were shaped as the result of global warming.

The exhibition hall will show the evidence of the history of coal mining and limestone quarrying, as these two activities have brought a huge impact to the shape of the site, this will display in the slide show room.
Located on the oldest dock in South Shields the North East Maritime Museum reflects the impermanence of the ship building industry. What is left behind when the ships of South Shields leave? Physically, no more than an empty dock and the scaffolding where the ship once stood. The memories gained by workers and residents still remain.

As time passes, memories and skills risk slowly dying out. The museum aims to preserve the heritage of the once vibrant ship building industry, and restore the communal pride created from industrial achievement by housing workshop spaces. This will continue the North East Maritime Trust’s efforts to include the local community, and earn the attention of a widespread audience.

The scaffolding used during ship construction has influenced the structure of the building. Elements of the museum are enclosed inside containers, suspended within the framework. The story of shipping in the North East is revealed as the visitor progresses through the scaffolding, reinforced by the use of large exhibits adjacent to walkways.
ruhel hannan

The Mesolithic Museum of South Shields

Sited on the South Shields coastline, in the popular recreational area known as the Leas, the Mesolithic Museum provides a shelter in the landscape and a starting point from which the visitor can explore and embark on their journey. The building exists as a linear path through the landscape, connecting subtly to its surroundings; with it being embedded and routed into the land in which it occupies. This metaphorically is justified with the historic finds under the layers of soil and sediment with some artefacts yet waiting to be discovered. This concept of going underground also provides the building with a sense of belonging and therefore shares a relationship with the artefacts it exhibits.

The site was inhabited during the Middle Stone Age ('Mesolithic': 10,000 BC-4,000 BC) and the New Stone Age ('Neolithic': 4,000 BC-2,000 BC). There have been many artefacts found along the coastline of South Shields, which mainly consist of flint tools and objects used to make them. There have also been Bronze Age and Iron Age finds; a well preserved roundhouse that had been burned down about 250BC was discovered during surveys. It was then used as agricultural land until the Romans arrived on the site in AD 80-100.
The North Sea is a major source of food for its surrounding countries. Over the last hundred years fish stocks have been greatly reduced by overfishing. A balance needs to be found between feeding the people and sustainable fishing. People need to have a connection with the food they eat and learn how it has arrived on their plates. The scheme will be a Learning Centre for the wider community of South Shields, showing and educating people the process that the fish have to go through before it ends up on their plate.

This will be done through a series of workshop type demonstrations and hands on learning: Concluding in the restaurant area where the fish will be served to them as a meal.

The workshops will revolve around two main events:
Handling the catch and Final products.
Handling the Catch
I. Sorting and Grading
II. Bleeding, Gutting and Washing
III. Chilling
IV. Storing the chilled fish
These activities are done in the teaching environment.
Final products
How the fish is then prepared to be presented for marketing and cooking, from the whole fish to fish fingers and all forms in between.
This is where the mini kitchens are used, with groups of people helping to prepare their own meals.
The coast of South Shields is an exhibition in its own natural landscape. Carved by the waves of the North Sea and the presence of man, South Shields has some of the richest exposures of rock from the Carboniferous period in England. South Shields is a popular location for weekend walks along the promenade that casually flows over the coastal landscape down to the rocks of Whitburn. Behind the site lays the empty space of the lost village of Marsden; where 700 people lived, and worked at the Marsden coal and limestone pits - once a thriving community of trade and pride.

Dropping away from the lush green plains South Shields beach is littered with great boulders and caves that hold exciting natural information between the cracks and crevices. In partnership with South Tyneside College and the locals of South Shields my design offers a series of structures where one can learn, work and explore. The museum exhibits rocks that are up to 350 million years old, carefully selected samples from the Quaternary, Permian and Carboniferous period. Moving across the site to the Research Centre, Humanity students and local Geologists can practice geological conservation. Getting into small groups they can venture down to the caves and rock pools by using the walkway down to the jetty. Depending on the tide, groups can either walk or sail to a desired location of interest and begin their study. Scattered along the shoreline amongst the rocks are the Nautical Data Modules that offer a sheltered space for one to upload photographs and data back to the Research Centre’s Laboratory without leaving their site.
Northumbria University Field Trip to Paris, 21st-25th February 2011

In February 2011 the second and fifth year Architecture students at the University of Northumbria took part in a field study trip to Paris. The trip introduced the students to the delights of a European city relating to the study of urbanism and the history of architecture. This trip was subsidised with the generous sponsorship from Ibstock.

The first day of the visit began with an orientation walk for the entire group along the River Seine from our hotel in Cambronne (where George Orwell lived whilst writing a section of “Down and Out in Paris and London”) to Notre Dame. Along the way we passed Jean Nouvel’s Musée du Quai Branly, Musée d’Orsay and la Grand Palais, amid many other memorable sights. After writing postcards home at Notre Dame, a small group of us ventured to l’Institut du Monde Arabe to see the innovative ‘clockwork’ façade, which changes to control the sun penetration in to the building throughout the day. We then walked to Luxembourg Gardens and along to the Pantheon, which was truly remarkable. The 67m, swinging pendulum suspended from the dome demonstrates the rotation of the Earth. We also visited la Louvre and Musée de l’Orangerie, which, disappointingly, were both closed on Tuesdays but were still worth the walk to catch a glimpse of their interesting structures.

On Wednesday, we travelled to the north east of the city to Parc de la Vilette, to see Bernard Tschumi’s folly structures that revolutionised urban park design in the 1980s. From here, we travelled back to Sacré Coeur and headed down to Espace Dali and to the Moulin Rouge. My favourite visit of the day was to Centré Georges Pompidou, designed by Rogers and Piano, due to its fascinating exterior where all the circulation and services are displayed on the outside and colour-coded. After changing at the hotel, we visited the Arc de Triomphe, and then dined in the Latin Quarter. On the final day, a group of us travelled out of the city to Poissy, to visit Le Corbusier’s Villa Savoye. This was, by far, my favourite outing of the trip, as I was taken aback by the architecture and the consideration of the quality of the spaces by the architect. We ended the trip visiting the Catacombs: Paris’ underground ossuary. On behalf of the school, I would like to thank Ibstock for their kind donation towards our trip. It was educational, enjoyable and a great experience for all.

Emma Jane Graham (Second Year Representative)
Northumbria University Architecture Society (ArchSoc) was established in 2007 to share and broaden its members' interest in architecture and the built environment and to encourage Architecture and Interior Architecture students from all year groups to interact.

Those aims are pursued by

- organising a number of social events during the academic year; including the Christmas Party, the Degree Show After Party and the Graduation Ball, this year, being held at the Baltic Centre for Art;
- an annual trip of architectural interest; and
- a new lecture series, inviting architects and artists to talk about their work.

In March 2011, the ArchSoc trip visited Salford Quays and Manchester, with free entry to Daniel Libeskind’s Imperial War Museum of the North for Society members. For the inaugural lectures, ArchSoc were pleased to welcome talks by twice RIBA Stirling Prize winner, Richard Murphy, and Mushtaq Saleri, director of Studio Three Architects. Plans for a more ambitious lecture series across both semesters of 2011-12 are currently being finalised.

The ArchSoc website became fully live in 2011 providing up to date information on ArchSoc events and hosting online portfolios for current ArchSoc members and recent alumni.

As a relatively new society it has grown quickly and the commitment and effort of the students who voluntarily sit on its committee and organised the events this year was celebrated by three awards from the Northumbria University Students’ Union; including the Best Course Based Society Award 2011.

ArchSoc reflects the interests of its members. Visit the website for more information or to get involved:

www.northumbriaarchitectureociety.co.uk

“I’m always enthused by the energy that exists within schools of architecture and my trip to Northumbria this year was no exception. Having seen some examples of student work in the studios, I was particularly impressed by the tactile nature of the projects and the use of physical models. As I hope I demonstrated in the talk the use of models as a design tool doesn’t have to end with education!”

- Mushtaq Saleri, Studio Three
master of architecture

The part two programme at Northumbria widens the range of learning opportunities afforded at Part I level. The over-arching strategy is a clear move from tutor-led teaching to self-directed learning, with all modules in the upper year being taught at Master’s level. This programme is prescribed by the ARB and validated by the RIBA.

Complex design projects again provide learning vehicles for the taught modules in the lower year. These modules cover a deeper understanding of building technologies, authentic scenario-based assignments which cover practice, management and law, and a broader exposure to cultural, artistic and social influences on the profession, underpinned by appropriate research skills. Students are encouraged to develop inquiries of personal and professional interest, in order to shape their own learning throughout the course.

The central philosophy of contextualism, in all its forms, remains at the heart of the programme. The course structure allows flexibility for a variety of student learning and outputs. Regional engagement is promoted via a choice of project sites which challenge the student to develop imaginative yet authentic proposals. However, the programme avoids parochialism by developing transferrable scholarship and skills, such as high level inquiry, complex problem setting, and critical evaluation, which can be applied to national and international contexts.

The programme seeks to synthesize peer and dialogical learning, collaborative and individual inquiries, social and ethical concerns, and design pluralism, in order to generate complex design proposals that demonstrate understanding of current architectural issues, originality in the application of subject knowledge and, where appropriate, test new hypotheses and speculations. In less than six years, the Master of Architecture programme has established itself as one of the best in the country, with clear aspirations to improve from year to year.

‘Within the design projects there is a remarkably high quality output of finished design… the best results are exemplary. The final documentation was at a level equal to if not more professional than a professional consultant could deliver.’

- David Page
Historically the area of Shieldfield lay just outside the city walls and, with the construction of the railway and then the central motorway, it is still separated from the city centre. The area saw extensive redevelopment in the 1950s and 1960s which partly broke up a traditional, working class community. Today the area is encircled by an expanding students’ village, but has little distinct identity except to the dwindling numbers of long-term, permanent residents.

Yet within Shieldfield, there are numerous grass-roots organisations, which hint at a social and cultural vitality, and other initiatives linked to its immediate neighbour, Northumbria University, and with the North East Circus Development Trust (NECDT), a charitable organisation, which runs the Newcastle Youth Circus and Social Circus Club in Christ Church who work with young people to encourage them to try circus skills and to get healthy in a fun, collaborative and non-competitive environment.

After many hours meeting with locals in the street, the hairdressers and the social club as well as participating in a village fete on Shieldfield Green, organised by Newcastle City Council’s Engage project, an incremental masterplan for the area was proposed. Looking ahead to 2012, 2020 and 2030; two axes were identified – an arts and performance axis linking the Ouseburn with Northumbria University’s City Campus East and a north-south ‘green’ corridor along Shield Street.
holy biscuit exhibition

These proposals were displayed in Christ Church, Shieldfield, as part of the official launch of Circus Central, marking the development of Christ Church as a permanent home for Circus in the NE, which will help the Five Ring Circus project create a legacy as part of the cultural offer from the 2012 Olympics.

In his address at the launch, the Leader of Newcastle City Council, Cllr. David Faulkner, commended our students for the links they had made with the community, their appropriate and thoughtful responses to their research in Shieldfield and for the quality of the work presented. In particular, he praised the ideas for ‘greening’ of existing buildings and the proposal to join up the currently fragmented open spaces, from which, he said, the council could learn lessons. The students also produced devices, sculptures and video pieces for Shieldfield responding to their research and personal interests. These were exhibited at the Holy Biscuit community gallery in February 2011.

A hardback book, documenting the Students’ research and proposals, is available from: http://www.blurb.com/bookstore/detail/1985977
The final year MArch thesis project is a year-long, personal investigation into a project located within the Northeast of England. We are interested in developing projects with a connection to place and that derive their inspiration from our region. The students are tasked with producing architecture that is value-driven, with social and environmental agendas, to improve the status-quo or solve problems within society. We believe architecture is a social art; collaboration and community engagement is encouraged. A number of students have developed live projects with real clients and as a result they have produced output that is authentic and learnt many skills that prepare them for their future careers.

The craft of making is also important to us; we develop language with use of models and drawings. We strive for projects that are both ‘beautiful and useful’ in the spirit of William Morris. Consequentially in recent years we have received numerous awards and commendations for our design work.

Paul Jones: Director of Architecture

AARON YOUNG, ADAM PARKER, CHRIS PERMAIN, CRAIG TURTON, DAN JONES, DONNA STRAUGHAN, GEORGE MOHTAR, GUY ISHERWOOD, HOLLY GALBRAITH, JAMES MANBY, JOHN JAMES, JONATHAN MOLE, JONNY FLAVIN, KEVIN O’NEILL, MARION PRICE, MARK STEELEMAN, MARK WHITING, MATTHEW POPLETT, PAUL BROWNING, PETER VIRTUE, SARAH SABIN, TASMIYA NASEER, WILL STATTON
part two projects

“City Walls, edges and memory spaces”

On Camillo’s Memory Theatre, “They say that this man has constructed a certain Amphitheatre, a work of wonderful skill, into which whoever is admitted as spectator will be able to discourse on any subject no less fluently than Cicero.”

The memory theatre is a vessel or space through which knowledge and understanding can be attained by immersion and spazio–visual means. That is, the placement and organisation of spaces and ‘things’ can have the capacity to tell or translate histories as a primary or ancillary function of a built form.

The old city wall, in its absence and presence, defines the centre of Newcastle and it is along this fractured edge that you are asked to derive place, context, character and narrative for your project.

“The Blyth Collier Brig” project

The Blyth Collier Brig project aims to demonstrate modern maritime and renewable technologies, to create employment and educate a future generation in marine engineering and encourage entrepreneurship and sailing skills.

The highest concentration of unemployment and economic deprivation in Northumberland exists in Blyth Valley and Wansbeck, a consequence of the long-term decline of shipbuilding and mining in the area and the lack of other employment opportunities. Recently new engineering businesses have been attracted to the area, but the skilled workforce required by these companies is not coming from the local population. The Blyth Collier Brig project aims to reconnect the local population with these high tech engineering companies by building a modern version of the Brig Williams and to undertake a recreation of the 1819 Antarctic voyage crewed by young people from Blyth.
“In Ouseburn”

The industrial revolution started in Newcastle in the Ouseburn valley. Lead products, ironware, glass, pottery, lime and soaps were all manufactured along the banks of the Tyne tributary in the late 18th, early 19th century. In the 19th century terraced streets clung to the valley sides and houses clustered along the river itself often with several families living in one room. Many of these terraces survived until the 1960s when much of the area was cleared for redevelopment.

There are new projects planned, some with architectural merit but many others of low quality. The Lower Ouseburn is a Conservation Area but, perversely, this has hampered good-quality, modern development and favoured pastiche.

“Memory and Meaning in Nuns Moor”

The area, which is now a park, got its name from the Nuns of St. Mary and St Bartholomew, who owned the land from the beginning of the 13th century. Later the land was given over to the Freemen of the City as grazing land. Part of that was bought by the Newcastle Corporation in 1651. In 1887 this was developed into a park covering almost 25 acres.

The site under investigation sits between Nuns Moor Rd and Barrack Rd. It is now a playing field, but was previously used by the Fenham Barracks for recreation. Land was taken from the Town Moor in 1803 to construct the barracks with the intention of protecting the city from the threat of Napoleon and, more immediately, to suppress sedition by the locals. The barrack’s architects, Johnson and Sanders, were local men. Sanders had previously worked for John Soane.
aaron young

A RIVER (re)CONNECTED River Wear Heritage, Education & Research Centres

The River Wear has played a significant role in the City of Sunderland’s economy for more than 650 years supporting heavy industries that elevated the city’s status through coal mining, ship building and particularly glass making, with which it has had a strong significance. The decline of these industries during the twentieth century resulted in large areas of the river’s edge at key sites becoming derelict and abandoned. Large numbers of workers from the city were made redundant.

This thesis unites engineering, environmental and scientific based education, research and industry at the heart of Sunderland’s economy and society, enhancing engineering knowledge and rejuvenating an important sector to the city’s heritage and future. Environmental and scientific education research resources for Sunderland promotes an emerging industry that once again puts the City of Sunderland and the North East region on the map as a centre of excellence, providing employment opportunities for the city and stimulating the local economy.

Development of the thesis proposal is in response to the UK Government’s “stimulus... for long term research and development” combining and facilitating local industries and enterprises in arts, creative, engineering and science sectors within one large working hub, “culturally [to] change attitudes towards engineering” (Sir James Dyson’s review of Britain’s capacity to generate and exploit technology).

In addition to the Wear Heritage, Education and Research Centres, access and use of the River Wear as an amenity is addressed to improve access to and from the city centre connecting people with places and establishing a ‘green park’ stretching along the river’s edge towards the university, reconnecting resident’s with Sunderland’s once greatest resource.
Phytoremediation is an emerging technology which utilises specific plant species identified to hyperaccumulate heavy metals and other contaminants from soils or water into their biomass. Current understanding of site specific applications however, is limited as of this point in time. The aim of the Ouseburn Phytoremediation Facility is to establish a platform to allow research towards identifying further hyperaccumulator species and their potential applications.

The Facility will demonstrate field research within the Ouseburn valley itself, as well as for the surrounding region by acting as a test bed of ideas. This creates awareness within the former industrial stronghold of the North East for the opportunity to promote and develop this alternative remediation method, furthering sustainable ambitions on a wider scale. The aspiration to develop the use of Phytoremediation species as a viable remediation technique addresses the disposal of the plants post-harvesting, and proposes alternatives for utilising the hyperaccumulator’s by-products after they have served their initial purpose.

Furthermore the process of phytoremediation has significant environmental benefits to species of flora and fauna and creates an aesthetic the public can enjoy and be part of. Traditional methods of remediation require industrial chemicals and earth moving, creating landfill and results mean the initial problem is just relocated.

The architecture and landscape created will strive to benefit both the local population and ecology through habitat creation. At this micro-scale the project will amalgamate the desire to remediate the valley’s contaminants sustainably, whilst accentuating and enhancing both the biodiversity and the existing cultural fabric, thereby creating a rich and diverse landscape. The ambitious project acts sensitively to local issues whilst providing a positive knowledge base of national and international significance.
Spy Hill is a stretch of industrial landscape on the periphery of Hartlepool, a town within the borough of County Durham, England. The area surrounding the now derelict magnesia works, which became redundant in 2005, is now largely derelict, and entirely disused. Although the district is well provided with social facilities nearby, close to transport infrastructure, and beautiful views; it remains a ghost-like landscape.

Proposals for the development of the area have, so far, not come to fruition. The land is contaminated, and secretly used by less scrupulous members of the public for fly-tipping, salvaging of steel, and as a daring diving pool on warm days.

New proposals for the site explore the possibilities of a more ‘generous’ connective architecture, as a common ground for resident’s to use. Adjacent to a large cemetery, the beach front has always been significant to the inhabitants of Hartlepool - the proposal seeks to understand the sites hidden spectacle; one with a tradition of resourcefulness and unruliness.

The project is set within an ensemble of disused industrial structures proposing both a short term and long term use for the site. A series of circular concrete pools remain from the former magnesia works, sited between the beach and the resident’s in an industrial tract. Some of these pools are used to reinforce and restore the land, growing dune grass, to be transplanted back onto the shoreline. Other pools are about the preservation of cultural phenomenon and religious occupation. In addition new infrastructure is proposed, in a hotel and train station, which link the abandoned site back to the historic headland and the ‘New Town’.
Ouseburn Gateway

The Ouseburn Valley was formed after the last Ice Age, 10,000-15,000 years ago resulting in a deep sided, wooded valley at the confluence with the much larger River Tyne. The valley became home to an industrial hub long before the Industrial Revolution of the 19th Century. Mills were established to harness the power from the Ouseburn and drive industry within the valley. Transportation of goods downstream to the River Tyne was also possible and a distinct advantage; consequently the area thrived and was a hive of industrial activity.

The area of land surrounding the joining of the two rivers became a major node in the city where it links the area of Byker with the Quayside, across the steep valley.

Post industrial collapse left the area neglected and forgotten by all except scrap metal merchants and mechanics. An arts cluster has established successful venues and a working collaboration that has seen it become the largest outside of the capital, established in former factories and warehouses, redundant from industry, creating a re-inventive arts industry leading to it becoming a destination, albeit an isolated one.

In 2010, the UK Arts and Culture sector suffered a significant setback as the government cut the Department of Culture, Media and Sport's budget by 41%. “The arts are a big loser in today’s spending review, facing a cut of 30%, which will be seen as devastating to England’s cultural landscape” (Guardian, 2010).

One North East, the regional development agency for economic, business expansion and regeneration strategies also recognised the significance of the cuts to the budget and of the significant contribution that art and culture play in the North East. Their research “highlighted the wide range of motives for organising festivals and events and the many purposes, including economic and social, that festivals and events can fulfil” (One North East, 2009. Festival and Events Strategy).

The proposal aims to connect the cultural activities along Newcastle’s Quayside into the Ouseburn Valley by creating a hierarchy of public spaces for activities. These will further enhance the cultural, economic, social and environmental aspects of the valley, promoting the artistic industry established in the Ouseburn. The spaces will be supported by social and cultural venues, creative industry units and residential accommodation ensuring occupation of the scheme whilst allowing the existing flora and fauna the opportunity to flourish creating pockets of habitat along the river’s edge.

NORTHUMBRIA PROJECTS 2011
A Place of Hope - Nunsmoor Soldier Rehabilitation Centre

The National Association of Probation Officers (NAPO) described ‘overwhelming evidence’ that ex-servicemen do not get the specialist help that they need after returning from active service, thousands of whom suffer from post-traumatic stress disorder (PTSD) leaving them struggling as their family and work lives collapse. A study conducted in May 2010 by the King’s Centre for Military Health Research into personnel who had served in Iraq and Afghanistan showed a 4% prevalence of probable PTSD. An estimated 180,000 troops have served in these two operations and if 4% develop PTSD, this equates to 7,200 more sufferers. The study also highlighted a prevalence of 19.7% for common mental disorders, and 13% for alcohol misuse.

Armed forces veterans now account for up to 10% of the prison population and 70% of those have been diagnosed with PTSD. A survey by NAPO estimated that 12,000 are under the supervision of probation officers, with a further 8,500 behind bars in England and Wales, at a cost to society of over £300m per annum. The total of more than 20,000 is more than twice the number of personnel currently serving in Afghanistan. An estimated 5% of the UK’s homeless population are veterans.

Currently in the North East of England there is an identified need to provide ex-servicemen from the region with the specialist help they require on returning from war. A design proposal for a rehabilitation and recovery centre to provide this support is to be located on Nunsmoor which forms part of Newcastle’s Town Moor. The centre will be specifically designed for British soldiers who have been injured during active service and will aim to offer counselling, physical treatments, psychological therapies and alternative therapies providing support and help to soldiers and their families upon their return to the UK. The Nunsmoor site acquired its name from the Nuns of St. Mary and St Bartholomew, who owned the land from the beginning of the 13th Century. The site has a long history of providing care and support to the local community with its historical links to the Nunnery of St Bartholomew and its close military connection to Fenham Barracks. The proposal creates an opportunity to reinstate a sense of place (genius loci) and to re-establish the historical connection of healing that once took place on the site. The form and nature of the rehabilitation centre and refuge unit is a response to the rich context in which they sit. The contrast between the light woodland and the fixed prominent remains of concrete tank traps along nearby Grandstand Road are reflected within the scheme.
donna straughan

Ouseburn Sustainable Community

Historically the banks of the River Ouseburn in Newcastle were a key hub for industrial activity. The steep valley became home to a busy labouring community where people lived and worked closely together. A decline in industry during the latter twentieth century left many sites once populated by factories and terrace housing, providing homes to the workers, abandoned and derelict. Many of these sites have yet to be developed due to land contamination problems and the difficult topography.

Several of the warehouses have been refurbished into artists’ studios establishing the Ouseburn area as a creative hub. This is the largest arts collective outside of London and is in close proximity to the art galleries of the Baltic, Sage and Biscuit Factory.

To support the artistic collective, a masterplan for a sustainable community has been proposed, to be located on a brownfield site close to the Quayside. This development will re-introduce traditional crafts and trades back into the area as well as help promote the concept of live/work. The development addresses the recognised city wide need for more localised affordable family housing close to central amenities, as well as highlighting the need for sustainable communities in the city. For future success of the area, socially and economically, there needs to be a balance between residential housing and business units. The sustainable community comprises of three elements;

A lively public square creates a focal point for the Ouseburn valley staging community activities. The square has been designed to draw people off the Quayside and up into the valley.

A semi-private courtyard surrounded by live/work units offering workshop space at ground level and 2/3 bedroom houses above. The dwellings proposed are constructed to the PassivHaus standard to create a sustainable unit that is super insulated, airtight and relies on solar gain for heating. This standard has influenced the design of the units through orientation, form, construction and materiality.

Large workshops surround a private yard to the north of the site; these workshops are abstracted forms that draw inspiration from industrial rooftops. Large roof lights are orientated north to receive diffused light for artistic crafts and trades occupying the workshops.

NORTHUMBRIA PROJECTS 2011
The Ouseburn Valley has a rich industrial history. Sited to the East of Newcastle City centre, the valley is currently a cultural hub with a contextual aesthetic unique to the North East. The built environment of the Ouseburn has evolved through industry, resulting in a distinct dichotomy of use and aesthetic. This provides a platform for the creative arts in an urban setting, and more rural practices and traits such as the local farm and contiguous wild woodland.

The legacy of the Ouseburn’s industrial past however is tainted by residual contamination and pollution which remains in the silt of the river and adjacent landfill site. The 4.5 million tons of landfill defines the valley, and conceals the Ouseburn culvert, creating a plateau to the north of the urban basin. The landfill encloses pockets of methane gas, formed through putrefaction and decay as the municipal waste within the terra firma perishes. The water flowing through this culvert is severely contaminated with raw human sewage from neighbouring capacities, emphasising the prerequisite for environmental intervention and a more efficient, sustainable waste water management facility.

The Ouseburn living machine system, which is the primary intervention within the scope if this thesis, is a composite of facilities which form a virtuous circle, dealing with the negative environmental issues which stand today as a consequence of Ouseburn’s industrial heritage. Listed below are the four principal facilities which interact symbiotically with the subsisting context, to eradicate the principal environmental issues affecting Ouseburn today.

1 - Living Machine Waste Water Management System
2 - Research Facility
3 - Visitors Centre
4 - Methane Extraction Sin-Gas Plant [lean burn system].

The scheme utilises bi-products such as fresh fruit, vegetables and Koi Carp to generate capital, energy and locally grown food for the valley.

The proposed strategy incorporates neighbouring public, businesses and educational facilities to inspire environmental awareness, with a view to emphasise the importance of a sustainably efficient and sympathetic urban landscape. Creating an accessible, recreational, green corridor through the valley will act as a catalyst for footfall and sustainable development, providing the context for an exemplar regeneration format.
Blyth Reconnected:  
Blyth Tall Ship workshop and visitor centre with Commissioner’s Quay harbour houses

The town of Blyth lays 13 miles North of Newcastle along the Northumberland coastline. Named after the river on which it grew up around, Blyth dates back to the 12th century, however its main development began in the 18th century with the introduction of the town’s port.

In its heyday, the Port of Blyth thrived owing much of its development to the industries of coal mining and shipbuilding, with the salt trade, fishing and the railway also playing an important role.

With the decline of many of the town’s tradition industries, due to growing competition from overseas countries, so did the port importance within the town and community. Throughout the years a number of regeneration projects have tried help rebrand and regenerate the town. Attempts to redevelop the Quayside have helped remove some of the evidence left by the old industries and have helped modernise other areas for efficient use today as a modern port or by other emerging industries.

These developments, however, remain isolated projects and fail to fully address issues of how the town connects with its riverfront and it continues to be an under-used asset within the town.

The proposed master plan aims to reconnect the residents of Blyth with its waterfront. Areas of new facilities would help increase Blyth’s tourism, whilst helping improve the environment in which the residents of Blyth engage with its waterfront.
[Sub]liminal Space and the Modern City

This project is concerned with the transformation of contingent space for contingent people. It acknowledges the creative arts as a tool for social interaction and communication as a means of facilitating the homeless man’s re-entry into society. The Corner Tower, the lonely fragment of Newcastle’s city wall, currently co-exists in a contingent urban landscape between 19th Century infrastructure and 21st Century commercial development. Sheltering Newcastle’s forgotten citizens - the homeless - who discreetly seek solitude beyond the gaze of the passing public, the wall today merely functions as a liminal passage alluding to the space between the modern city and its historic remains. Considering the physical state of the wall as a metaphor of the homeless man - forgotten and overlooked by the wider society, the project threads together the forgotten spaces adjacent to the tower by publicly re-establishing this protective relationship, highlighting the plight of both the wall and the homeless in gaining society’s acceptance once more. Utilising the ambiguous nature of liminal space as an area to practice tested theories in the creative and performing arts scene, the transformative potential of this ‘in-between’ state could be realised.

The project develops a series of spaces concerned with the communication, self expression and either the subconscious or physical interaction of the homeless and the public. Over time the transient nature of these spaces will begin to blur social boundaries, mitigate the implications of homelessness and reduce the exclusion of both the wall and the homeless. This final stage is celebrated by the notional transition of escaping the liminal phase and ‘re-entering’ modern day society through the crossing of the city wall to the performance platform it supports. During the Medieval Period, the Corner Tower created a sense of inclusion, protection and ownership within its walls. Connectivity between the tower and the Quayside to the South was strong, utilising the medieval chares that ran perpendicular to the River Tyne to navigate the shift in topography northwards beyond the extent of the city wall. Following the pressure of industrial developments and the growth of an ever sprawling modern city, the piecemeal removal of the wall in the 18th Century weakened the tower’s importance reducing it to a faint memory of its role as a guardian.

The sensitive re-stitching of both the disparate urban fabric and the homeless man’s position in modern society requires a considered urban strategy outlined on the board below which begins at Croft Stairs and continues southwards towards the perpetually vacant site- 57 Quayside.
Newburn Renewable Energy Education Centre

Newburn, sited on a bend on the River Tyne west of Newcastle City Centre, was once a hub of industrialisation and energy production, established during the Industrial Revolution. Since the late Twentieth Century the area has lost its identity as industry and power production has ceased operation, leaving a large post industrial landscape behind.

To reconnect with the site’s history and to reinforce the North East’s emerging renewable energy sector, this centre develops and educates a regional knowledge base to further harness and maximise energy from renewable resources. Research of the industrial heritage of the site identified coal staithes; imposing timber framed mega-structures constructed to allow coal to be transported by train to boats waiting in the deeper water of the channel. The repetitive yet spatial components of these monuments were replicated within the energy centre to symbolise energy movement from the past.

The renewable energy centre harnesses energy from its loci, utilising the opportunities the site presents. Tidal movements in the river are utilised to turn hydropower turbines within the core of the centre. Geothermal boreholes harness pre-heated mine water at a former mine at Throckley, to the north of the site.

An ‘Energy Loop’ runs from the mine to the villages of Newburn and Ryton connecting and integrating local people with the proposed centre, forming a wider communal hub, accessed by river footbridges. In addition to energy production hubs, the centre provides above and below ground workshops and demonstration zones, as well as laboratory and library facilities on the upper floors, affording views across the Tyne Valley.
Walls, Edges and Memory Spaces

The concept of the ‘memory theatre’ and the principles of the ‘art of memory’ are used to re-tell the story of an under-celebrated piece of valuable local heritage: Newcastle upon Tyne’s Medieval town wall.

The technique is manifested as an ordered sequence of ‘mnemonic pavilions’, containing a series of ‘memory spaces’ or ‘loci’, ascending the site towards an isolated fragment of the town wall, The Corner Tower. Each memory space references a key point in the story of the town wall, from genesis to destruction.

Associating fact with place and object aids visitors to later recall the story of the Town Wall, therefore allowing an experience of the city with an increased awareness of the history of their surroundings and an understanding of how Newcastle developed into its modern existence today. The city itself becomes a museum: its streets, buildings and ruins the artefacts.

The ruin of the Corner Tower is the terminus of the mnemonic sequence. Here, a new insertion conceptually reconnects the wall creating a new observation tower that represents the present day. The tower, watched, becomes a watch tower once again.

The form of the architecture is derived directly from a more site specific history, representing the shadows of former occupation in the configuration of the buildings and the pigmentation of its concrete floorscape. The language expresses aspirations of physical permanence in the monolithic form of the architecture, whilst a stainless steel skin wraps the mnemonic pavilions representing the truest immortality attainable; that of a memory passed down through the ages.

The courtyards created between the pavilions are themselves intended to feel distant from the city providing a place of respite and contemplation, where visitors, local residents and workers can enjoy the calm and linger for longer periods, losing time while the city bustle around continues.
Pyrolytic Power Plant [PPP] Blyth, Northumberland
Blyth’s Motto “We Live by Industry”

The closure of heavy industries in Blyth has left a legacy of social exclusion; educational underachievement and third generation unemployment, with large tracts of land disused and contaminated. The remaining commercial activity at Blyth Port employs more Dutch than local people.

The need to secure the UK’s native energy supply is a key theme to Government energy policy as the UK’s indigenous energy production declines. The UK policy is to provide energy security through diversity in sources of energy, suppliers, and supply routes.

The creation of a network of small power plants moves energy generation closer to the point of use for efficiency and steps away from the dependencies on a single fuel source typified by large national infrastructure.

The project proposes a local power station integrating infrastructure benefiting the local community. The proposal processes domestic waste and converts this to energy and usable by-products. Integrating “green” technologies into the townscape promotes a positive image of Blyth at the forefront of renewable energy technologies nationally.

Effective land utilisation facilitates economic growth with landscape remediation of large areas of brown field sites for food production and energy crops allowing dormant, unproductive land to become an asset.
Blyth Institute for Engineering and Marine Research

Forming part of the South Harbour Masterplan, a proposed Institute for Engineering and Marine Research aims to help bridge the gap between the town’s emerging industries and the educational system within the town.

Following the collapse of traditional heavy industries within the town, Blyth currently suffers from third generation unemployment. Unemployment figures for Northumberland show that the Blyth Valley is responsible for over one third of the county’s total unemployed.

Despite this fact, companies such as NaREC, Clipper and aluminium boat builders, Alnmaritec are committed to the area and are currently thriving in each of their respective fields of renewable energy development and marine engineering. These successful businesses continue to grow within the town despite the fact there is a perceived lack of qualified workforce in the town, resulting in jobs within these companies going to more qualified individuals from outside the area.

Blyth’s rich maritime heritage creates an appropriate educational content around which a marine based curriculum and apprenticeship scheme could deliver a new generation of young people, skilled in the traditional local industries. The institute partners with the Blyth Tall Ship Project as a vehicle for teaching young people to NVQ level, the individual trades associated with boat building.

A visitor centre promotes taster sessions and after-school projects to involve school children whilst evening based adult classes, promote marine based teaching ensuring the facility would become an integral part of the community, leaving a lasting legacy amongst Blyth’s residents.
Ouseburn Wharf

The Ouseburn Valley has grown and developed over the past 20 years from a former industrial landscape, dotted with relics, into the largest arts collective outside of London. The thesis project aims to continue this progress by encouraging and nurturing creative industries, strengthening the current community. These industries have developed by taking advantage of the current situation, by moving into and adapting existing industrial spaces.

Ouseburn Wharf allows these industries to continue to do this; to expand, mix and thrive. Spaces are designed to allow a mixing of functions which are themselves quite abstract. Functions, people, vehicles and objects co-exist without hierarchy creating strange organisms of urbanism and subculture.

The project is deeply rooted in the views and theories behind the situationist movement. The structural frame acts as an infrastructure into which spaces slot into or voids are left over. The building is dynamic and ever changing, inhabitants are encouraged to personalise spaces – inside and out, the art they create is here one day and gone the next, the only constant is the steady rhythm of the frame. External cladding changes are dependent on a functional need for light, aesthetics, acoustics, openness or privacy; a living skin or membrane.

Conceptually, a compact and sustainable city design; a mix of functions within one structure. The densely populated building limits the urban sprawl, containing it to a small footprint allowing large areas of parkland for public use and events; strengthening community and promoting health and wellbeing.
The thesis is located in Blyth, a coastal town in south east Northumberland, approximately 13 miles north east of Newcastle Upon Tyne.

The town was once a centre of engineering and industry supporting large numbers of workers, but was left seriously affected when its principal industries of coal mining and ship building went into decline and closed altogether by the end of the twentieth century. Three generations of unemployment have created the highest economic deprivation in the county, dramatically lowered educational achievement and increased anti-social behaviour in the area.

The proposal, situated on Commissioners Quay, provides facilities for two grassroots organisations; The Blyth Tall Ship project and Headway Arts. By combining these facilities on this site, the project addresses the issues of educational underachievement and social exclusion through vocational training and participation in “hands-on” activities.

The legacy of the scheme incorporates three components; a Theatre, Educational Facility and Research and Incubation Units.
Empowered Community: Cambois osmotic power facility

A reaction to and campaign against a proposed coal fired power station in the former pit village of Cambois inspired a project of opportunity.

Cambois is located between the North Sea and the River Blyth, between dunes and slag heaps, isolated and separated by its geography and its industrialisation. Until 2003 Cambois residents had been neighbours with Blyth Power Station for fifty years. The landscape bears the remains of the operation scarred with embankments marking the routes of coal trains, foundations of buildings long gone and a sense of abandonment since the closure. Former mining works and terraced houses have also been removed leaving a community to seek opportunities and employment elsewhere.

There is a beauty to the post industrialised landscape, one that nature inhabits regaining the balance man took away. The project aims to provide an alternative, renewable energy source from utilising the potential Osmotic Power that naturally occurs when saltwater and freshwater mix. The Ash Dock that serviced the former power station provides an opportunity to extract saltwater from the River Blyth and produce electricity for the residents of Cambois, Blyth and the surrounding villages creating an 'off grid' energy island.

To reverse man’s intrusion into the landscape the large expanses of brownfield site that remain will be transformed into a phytoremediation nursery to assist the natural process of recovery. Phytoremediation species such as Indian Mustard and Tall Fescue Grass are able to remove harmful heavy metals and contaminants from the soil restoring a natural condition for cultivation and enhancing the natural flora and fauna that occupy the site, and the bordering Site of Special Scientific Interest.

Both processes are carbon positive allowing the carbon credits generated to be traded and reinvestment put into developing the technologies further. Employment opportunities for local residents will be established as well as the provision of community facilities echoing the former mining settlement model for workers and their families.
Ouseburn Valley

The thesis project is located in the Ouseburn Valley, a former industrial area to the East of Newcastle city centre. The area has a long tradition of industry and craft dating back to the beginning of the industrial revolution, with the River Ouseburn playing a key role, as a transport route to the Tyne and beyond. As technology and transport advanced at the start of the 20th Century industry began to move elsewhere leading to the area falling into decline and the subsequent disbanding of communities.

Recently occupation of the area by artists and musicians has created the largest artistic cluster outside of London, sparking regeneration of the former industrial warehouse buildings and creating a strong artistic community. The surrounding communities of Shieldfield, Byker and Walker still remain some of the most deprived areas in Newcastle. The project aims to benefit both the surrounding communities and the Ouseburn area itself by providing a Vocational Education Centre.

Many students in the surrounding communities achieve below average grades compared to the Newcastle and national average at GCSE’s and A-levels. There is a need to provide an alternative education route to the traditional academic route to allow the prospective students a route to education and future employment, engaging students left disinterested by the current education system. The centre aims to provide a project based pedagogy influenced by European systems such as that in Finland, as opposed to the instruction based pedagogy common in most academic institutions.

The project based pedagogy is reflected in the design of the building: a large learning street forms the spine of the school connecting the large open refectory to the individual department blocks. The building is a metaphor and a function for the wider context, a fluid landscape conceived as the learning street anchored with rock-like forms that house the workshops.

Along the learning street different environments are distributed encouraging social interaction, group based learning and individual study in an open informal environment. Beyond this area sit the heavyweight concrete departments that are anchored into the rising terrain. Their heavyweight nature and siting helps reduce sound, providing environments better suited for the concentration required for classes. These areas are designed for the specific activities taking place in them and again to encourage group learning in the class.
Fenham Necropolis

The church yard used to be at the heart of a settlement and was a fundamental adjunct to every town. However, the increasingly secular or agnostic culture of the nominally Christian population and the increasing medicalisation of health and death have acted to hide the act of dying and diminish the rituals of death.

At the same time, our society has increasingly become multicultural with communities at, perhaps, their most separate at times of loss and grief. That cultural diversity is most clearly seen in Newcastle upon Tyne in the area of Fenham.

The site of the Necropolis occupies the southern part of Nuns Moor Park in Fenham, Newcastle. This park once formed part of the grounds of the nunnery of St Mary and St Bartholomew and has a history of burials dating back to the 13th Century.

The thesis addresses the specific customs, rituals and practices associated with death for each of the communities living around the site. By creating a pantheon, the unique traditions of each culture are respected whilst the whole community is united by the solidarity of the common experience and the “church yard” is restored metaphorically and physically to its central location in the life of the area.
Blyth renewable material and technology centre

The juxtaposition between large zones of derelict land and protected habitats on the banks of the River Blyth has been created from the expansion and subsequent collapse of heavy industries in Blyth. Redevelopment and reconnection of the edge condition allows the residents access to the river, celebrating its heritage and potential beyond the palisade fence.

A rail link runs on a high level platform along the harbour edge, echoing the movement of coal onto former staithes. This link connects the green spaces of Ridley Park and the Site of Special Scientific Interest, via the centre.

The design project proposes a research and education centre, centred on renewable material and technology developments with zero carbon cradle to grave production. Creation of a world leading centre references the National Renewable Energy Centre (NaREC), a world leading institution testing renewable energy prototypes, adjacent the site. This in turn supports local legislation for Blyth to be promoted as a hub for renewable technologies, creating a strong sector to return engineering jobs to the town whilst addressing third generation unemployment in Blyth.

Sited in a former graving dock the language references local historic industries. The structure of the building examines scaffolding structures historically used for ship construction whilst hull construction and prefabrication techniques have also been employed within the internal accommodation units. The project’s scale forms a beacon in the local area, acting as an aspirational target for future generations.
SARAH SABIN

CUE

Social, political and economic agendas in recent years have placed a strong focus on sustainability and developments which do not impact negatively on the environmental legacy for future generations.

Over 50% of the world’s population now live in urban areas and this proportion continues to increase steadily; with cities generally importing 100% of their food produce and energy requirements, they are becoming increasingly unsustainable environments. As urban futures are inevitable for a large percentage of our population, it is vital we begin to understand and develop a self-sustaining city environment.

CUE is the first centre of its kind in the world. Building upon current research, it will focus on developing theories and feasibility for making cities located within temperate climate zones, such as the UK, sustainable.

CUE will challenge current research and understanding. It will be capable of testing existing technologies, as well as providing flexible facilities which will be able to adapt to the needs of research and education both now and in the future.

CUE will be developed in two phases. Phase One will see the development of the education and research facility. As well as meeting the programme needs of the education and research centre, it will provide a new focus for Pilgrim Street East and will also act as a catalyst for the area’s regeneration and define a key gateway to the city centre from its southern approaches. The site layout will see the built form confined to the site’s northern edge, allowing the heart of the site to be ‘given back’ to the city as a ‘green’ recreational space, accommodating both communal leisure opportunities and potential sites for small scale food production.
Blyth Port Harbour: Cultural Arts Centre

Located on the north east coast of England, Blyth is an ex-mining town that sits on the River Blyth. The area has a rich maritime history with the sea farer Captain William Smith, departing from Blyth in 1819 to discover new land in the Antarctic Sea. The town owes much of its growth to the port, which during the twentieth century was the largest coal exporter in Europe. Shipbuilding was also an important industry to the town, contributing to the sixty per cent of the worlds ships being constructed in the north east during the last century.

In the 1960s, the decline of the shipbuilding and heavy industries brought many social and economic problems to Blyth, leading to the steady decline of the area. In 2004, the national index of deprivation highlighted the Blyth and Wansbeck area in the top ten percent of the most deprived areas in the UK. The town is currently experiencing third generation unemployment, a lack of motivation in the traditional education system and associated anti-social behaviour and health problems. Blyth suffers from a disconnected landscape created by barriers to the waterfront, restricting access for local people and surrounding wildlife. The separation of the community from the port industries has created a diminished sense of place over time through loss of identity and experience.

The thesis proposes to reconnect the local community back to the waterfront by creating an accessible destination to attract people, create jobs and enrich lives. The brief was formulated from the needs of two local community groups, with the main aim to produce a facility that offers a sustainable education process, whilst creating a supportive, employable workforce. The project will build upon the existing education facilities in the area by offering a vocational training facility for children and young adults between the ages of 16-19. Located on the Quayside, the design proposal includes two buildings linked by a renewed public realm strategy to encourage movement to the river along an activated route from the town centre. The first building will focus on the arts and theatre with the aim to inspire the local community through creative learning. The activated route will feature a series of ‘outdoor rooms’ which exhibit the local heritage and encourage place making potential. The second building focuses on skills based training through boat building, aiming to complete a full scale brig for further education opportunities and the chance to take to the seas.

The proposal reflects the scale and materiality of the port, providing views over the surrounding landscape. The building form relates to the industrial sheds that surround the site. Internally the exposed cruck frame provides a reference to the ship building process and reflects the craftsmanship in carpentry.
Maki argues that linkage is the ‘glue in the city’ (cited in Trancik 1986 p107); it is the material that links all the layers of activity together. Trancik talks of the importance of a clear linkage between routes and buildings on a route for consistency of urban experience. The work of Cullen and that of Behrens and Watson have also been referenced, employing their strategies of urban planning within the project.

One of the principal urban moves with the initial scheme was to reconnect the City to the Quayside and in doing so integrate the Stephenson Quarter within the city. Dobson’s building of Central Station had left the area somewhat detached. To have some ‘glue’ to tie this space back into the city is imperative for its success. This ‘glue’ is conceived as a paved pedestrian route from Newcastle’s key landmark, Grey’s Monument, to the Central Station, terminating at the Quayside using a consistent language of materials and detail.

The proposal is a journey that (re) introduces the people of Newcastle to the town wall. A processionary route ensures the visitor encounters Newcastle’s historic built environment, through new interventions that heighten the visitor experience articulating and punctuating the route from Grey’s Monument to the Quayside.

A continuous cobbled floorscape runs from Grey’s Monument to the Quayside with certain thresholds marked to articulate the route.

A new entrance to Central Station creates a secondary entrance aligned with the town wall, aiding the linear movement of people through the city. The Documentation Centre on Orchard Street sits adjacent a substantial stretch of the wall, providing information to the visitor and doubles as the park office. Within the park is an orchard recalling the ancient Forth orchard, planted by the monks of Whitefriars.

The tower is another vertical mark in the city, containing information and exhibition material on different fragments and sections of the wall. There is a panoptical platform at the top of the tower to set the visitor experience in context.

The subtleties in the scheme are supported by a restrained architectural style and an urban design strategy that acknowledges the nature of the site, the activities evoking the memory of previous industries and structures. The notions of hierarchy and legibility are demonstrated in the design strategy and detail.
“Northumbria has a strong studio culture, drawing on powerful regional roots... All design work is progressed through intensive model-making, complementing painterly renderings of technically literate drawings... A strong studio culture, drawing on powerful Northumbrian roots”

- Tim Carlyle writing for the Architects Journal

“The architecture projects on display at Northumbria are grounded in the history of the sites and, at their best, a realisation of a social engagement with the communities in which the students have been working. “

- Katherine Hayes writing for bdonline.co.uk
This studio based programme uses the design project as the central vehicle for learning and is design to stimulate and provoke imaginative responses to the re use and adaptation of existing architectural space. The programme is concerned with the manner by which interiors are conceived and integrated into the existing host site, with an emphasis placed on the recognition of built fabric and site narratives as precursors to the development of an adaptation.

The programme is studied jointly with Architecture in year 1 where key principles and processes are examined and exploited within the context of the interior. Students benefit from this associated relationship, working together within a broader studio culture where ideas and attitudes towards Interior Architecture are discussed and then acted upon. Thereafter the curriculum is entirely subject specific, with year 2 using the design project to test strategies for adapting and occupying existing buildings. Year 3 design projects present opportunities for a deeper critique of the subject and are both directed and self initiated.

Alongside studio projects, students examine both academic and practical aspects of Interior Architecture such as its history and theory, as well as associated construction, sustainable design and management principles. These subjects are critically aligned to studio based project work, and provide valuable preparation for work in practice.

Paul Ring : Programme Leader
ma in architectural studies

This one year programme for postgraduate enquiry and exploration of architectural themes. This is centred on a Masters level dissertation, which responds to the RIBA's aims of the development of specialist interests and knowledge in the profession of architecture.

The Master's dissertation is designed to allow the student to demonstrate the ability to design and answer their own research question. The means of presentation will be equivalent to a 20,000 word thesis, but the dissertation may be submitted in a variety of formats, dependent upon the self-selected field of inquiry. The student must evidence considered research and data collection, devise, analyse and implement a suitable research methodology, and display intellectual breadth and depth by suitable and imaginative communications methods.

Peter Holgate : Programme Leader
the northumbria creative curriculum: david hunt

This inquiry concerns the ease of learning of Computer Aided Architectural Design (CAAD) and consideration of where the computer adds value within the architectural design process. Concepts of creativity are examined, with particular regard to whether CAAD supports or hinders the architectural design process at a variety of work stages, from inception to communication.

The findings of this research informed the framework of the Northumbria Creativity Curriculum, a suite of learning materials which reflect the learning and teaching strategies employed by the architectural programmes at Northumbria University. These materials have been made available by Autodesk to the wider architectural education community:


‘...the Northumbria Creativity Curriculum presents an amazingly detailed and systematic examination of the steps/workflow highlighting the goals at each stage of the design process and describes how digital and physical tools can be applied to help accomplish those goals. This approach to understanding and enhancing the entire process is something that all design instructors need to think about as it applies to their work.’

- Glenn Katz, Department of Civil and Environmental Engineering, Stanford University
portable wildlife observatory: paul jones

Collaboration with local practice: A wildlife observatory + gallery in Huttoft, Lincolnshire.

Paul Jones, the Director of Architecture, has won a commission to design a wildlife observatory and gallery at Huttoft in Lincolnshire, through an international design competition, organised by Lincolnshire County Council, the Arts Council and a number of wildlife charities. Paul’s design was chosen from in excess of 80 entries.

Paul has chosen to join forces with Newcastle-based Surface Light Space Architects to build the project, because of their interesting design approach to architectural projects as well as their interest in innovative construction techniques. At Northumbria we are committed to collaboration with architectural practice; these associations provide excellent teaching and research vehicles, they also provide students with an excellent insight to work in practice, but within a ‘scaffolded’ educational environment. The architecture team practices research-informed teaching and engages students with exciting authentic projects. Real life projects inspire the students to produce excellent output.

The original design was chosen because of the environmental credentials of the scheme as well as a commitment to built to building off-site in a factory, constructed in bays and clamped together on site. It was also conceived to be easily dismantled and relocated further inland should rises in sea level and coastal erosion threaten its location.

The aim is for the building to be ‘autonomous’, generating its own power from renewable energy derived from the site, the team are working with Zaid Alwan a sustainability expert and lecturer within the School, to try to achieve a BRE Environmental Assessment Method (BREEAM) outstanding rating for the building. BREEAM, developed by the Building Research Establishment, is the leading and most widely used environmental assessment method for new buildings.

Paul said: "It is very rare for an architect to work on such an exciting project on a remarkable site. A gallery and a visitor centre is a commission that is a once in a career opportunity..........We are delighted to be working with such a progressive client and partners in practice. They are very committed to pushing the design and environmental credentials of the scheme.”

A number of our MArch students have already made a contribution to the project, and gained employment in the practice. The building is due to be completed in the spring of 2012, in time for the summer season.
integrated habitats competition: paul jones

Runner Up Paul Jones with David Dobreiner

The scheme is designed house 500 people in a compact-sustainable development on a terraced slope, such that every one can step directly from their front door into a rich realm of biodiversity. The scheme is intended to respect all species; living together in an integrated landscape, which encourages nature to thrive, and hopefully encourage species which are now largely extinct in the area to return the Northeast.

The proposal is on the banks of the Tyne on the old Swan Hunter site. The site was once a bustling community built around the shipyards, but now is derelict. The facility hopes to reintroduce a sense of community by integrating living and working, and in doing so promotes compact living.

We have reconsidered the terraced housing typology that was ubiquitous in the northeast in the last century; our terraces are stepped up the hill from a public square where community facilities that contribute to a sense of place are located. The second tier houses the work units for light industry.

The facility is carbon-negative and uses environmental materials. Energy is generated from hydro-turbines located in the river. The scheme has been designed to avoid the need for heating or cooling. Food for the residents is grown in the allotment gardens as well as the greenhouses. Access through the community is via staircases and wildlife corridors as well as a lightweight/ transparent pedestrian/bike ramp connecting all residents to common spaces and services at grade level.
Paul Jones, the Director of Architecture, has been awarded the National Teaching Fellowship – the most prestigious award for excellence in Higher Education Teaching.

This award is the culmination of 15 years teaching in higher education; he has built a reputation within his subject and undertakes leading and influential roles in the university, nationally and at an international level. He has enhanced the learning experiences of his students by adapting traditional and developing innovative new methods of teaching in architecture, drawing upon research and scholarship as well as his own professional evidence base.

Paul’s overall aim as a teacher is to encourage students to aspire to and attain the highest possible academic standards. Fundamentally, Paul’s approach has been to engage students in the challenge of learning and to demystify its application, especially their design process. He has endeavoured to create an environment where his students enjoy their studies; in his experience happy students are more productive, through active and positive engagement, students’ work achieves a higher academic standard. In 2010 in the NSS architecture, at NU, achieved the highest national scores for student satisfaction.

Paul practices research-informed teaching and engages students with authentic projects to enable deep learning; students’ exposure to real projects and their contribution to exhibitions and student conferences has transformed their learning experiences. Paul continues to enhance his own skills in research and design practice; he is an award winning architectural designer with an outstanding record in international architectural competitions. With this success Paul has led students and colleagues by example, reframing his own design processes into design guides and teaching materials, navigating students through their own design process which has led to a number of them achieving international success with their own work. These design guides were also submitted for the RAE and have led to Paul’s expertise being sought through international design consultancy.

The awards will be presented to Fellows at a celebration event in London in September.
In 2010, Lincolnshire County Council and ArtsNK invited proposals for a series of structures to be located along a remote stretch of coast line north of the wash.

The inaccessible locations and extreme conditions meant the structures had to be designed to withstand the full force of the North Sea and materials were chosen requiring little maintenance. The construction of both structures was essentially the same, allowing them to be prefabricated off-site and erected in only 24-48 hours, however the designs evolved quite differently in response to their sites. Both designs were intended to play with your senses and perceptions of scale. At the end of their lives, the structures, including their screw-pile foundations, could be removed completely without leaving any physical trace at the sites.

Site: Chapel Six Marshes  
Brief: On the Edge of Hearing

Designed for the more remote site, the structure hunkers down in the dunes to offer shelter to the beach strollers who stumble across it. It is a quiet corner, where no corner should exist, a place in which the constant drum of the wind is temporarily diminished to “the edge of hearing” allowing the quieter sounds of rain falling or the conversation of companions to rise to the fore.

The form of the structure alludes to numerous visual references; the hull of a beached ship; two barrel waves frozen at the moment of convergence; or the inside of a conch shell. As you pass through the structure there is a Brobdingnagian shift in scale, as though you are briefly enveloped in the dunes like a crab overcome by shifting sands.
Site: Moggs Eye       Brief: Weathering the Edge

The structure proposed for Moggs Eye is located next to a small car park and will usually be approached from the land, so it is intended to act as a gateway.

You hear the structure before you see it. The mirrored discs which rotate in the wind, generating low wattage electricity for maintenance-free LED illumination, spin flute-like aerophones. As the wind grows stronger, the tone changes from a low murmur to a six-part harmony. The discs scatter sunlight dancing across the dunes, whilst camouflaging the source of the light against the horizon until you are almost upon it.

Design Team:
Alex Cunningham
Sebastian Messer
Drew Mills
Paul Warrior

with
Barry Knighting, structural engineer
Bill Doney, Draughtec Ltd.

www.studiomwm.com/projects
the G.R.A.D. programme: sebastian messer

In January 2010, responding to the difficulty which many architecture graduates were having in securing relevant work post- Part I and II, the Northern Architecture GRAD programme was conceived as a means of helping both un- and underemployed architecture graduates (referred to as GRADs), and the region as a whole, by applying the GRADs’ skills and enthusiasm to speculative and real projects.

Once started, our intention was for the GRADs to become self organising and self motivated, committing what time they had between part time jobs to the programme, but free to leave at any point should an employment opportunity arise. In the meantime, working on a range of interesting, self-generated or ‘live’ projects, the GRADs gain valuable experience and knowledge, work with real clients and improve their portfolios and CVs.

The aims of the GRAD programme are to:

1. Improve the graduates’ portfolios and CVs and aid their prospects for full time employment
2. Benefit the graduates directly from the experience in growing knowledge, confidence, skills and learning from each other
3. Benefit the region from the GRADs’ speculative efforts identifying problems that might have a design based solution
4. Develop opportunities which could lead to funded work – either for the GRADs or for local practitioners

The GRAD programme is hosted within +3 Architecture’s office, who generously share their internet access and kitchen with the GRADs. The GRAD programme has also received seed-funding from both Northumbria and Newcastle Universities.

Get involved:

www.archigrad.co.uk
studio@archigrad.co.uk
The right sort of projects

The projects must be stimulating, challenging and relevant to the region, but at the same time not exploit the GRADs, or take work away from other professionals. It is our hope for the GRAD programme to generate real, viable projects – either for the GRADs themselves or local practices. Projects can range from small scale interventions, through research, to large scale urban analysis. Potential projects are evaluated against a set of criteria.

The projects should:

• not exploit the GRADs’ voluntary labour and not take work away from other professionals
• provide learning opportunities for the graduates
• be interesting and challenging
• be relevant and produce tangible results for the GRADs
• have the potential to generate real projects which would not be possible without the speculative efforts of the GRADs.

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The GRAD programme works!

Over 60 % of the GRADs have progressed to paid work in architectural or related positions within 4 months of starting the GRAD programme.
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