CONTENTS

YEAR 01

Year Co-ordinator
Orla McKeever

Design Studio Staff
Patrick Creedon
Adam D'Arcy
Helen Devitt
Seán O'Muirí
Dr Sarah Mulrooney

Studio Contributors
Dr Jim Harrison
Maroun Tabbal
Aoife Browne
Paul Durcan
Valerie Byrne
Maud Cotter
Niamh Hurley
Jack Lehane

Life Drawing
Megan Eustace

Photography
Jed Niezgodo

CCAE Workshop
Aoife Browne

Applied Technology
Dermot Harrington
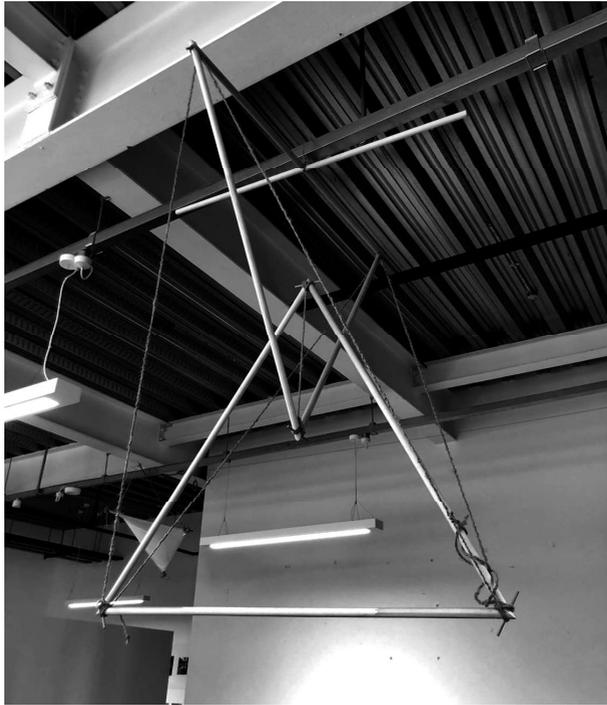Brian McKeown
Seán O'Muirí

History & Theory
Kate Buckley

Construction, Materials, & Structures
Dr Jim Harrison
Vesna Jaksic

Fig 1.00
Assemblers Group, Maker Project, Model

Fig 1.01
Robin Kiss, Precedent Study

Fig 1.02-1.04 (opposite)
Sketchbook Project (from right): Queensly Ingbenosun, Isabelle Shelly, Amy Cotter

The first year of the undergraduate programme involves equipping students with key design skills and representation techniques to enable communication of ideas. Students entering the course arrive with different skill sets, some creative and others technical. A strong emphasis is placed on the development of analogue sketching, drawing, and model-making skills as primary communication methods within the first year of the course.

The year commences with a series of skills-based projects that aimed to strengthen both creative and technical ability across the whole group. The initial projects included, sketching within the urban fabric of the city, the surveying and completion of orthographic drawings of Georgian doors, and the investigation of light as a material, through modelmaking and photography. Students learnt by testing ideas, supported by presentations, workshops, readings and site visits. On completion of the introductory skills-based projects, the students were asked to design a work-live unit for a bicycle shop, fruit and vegetable or book shop. Each student was allocated one of three sites, located within the city. The sites were on Barrack Street, Shandon Street, and the Coal Quay.

Second semester commenced with an in-depth investigation of precedent studies. Each student was assigned a twentieth or twenty-first century architecture project. The students researched the architect and the extent of their work through temporal, social, cultural, and technical perspectives. Scale models were prepared and presentations of their research were communicated to fellow students.

The 'Maker Project' explored how we might build more sustainably. Critical themes such as, abundance, complexity, stability and evolution, were investigated through a one week workshop led by Maroun Tabbal, followed by concept development. The securing of funding from the MTU Learning and Teaching Unit contributed towards the translation of the students' designs from maquette to one to one scale prototypes. The exploration of low-carbon materials, reinforced investigations within the Applied Technology module.

The final project of the year, an Artists' Residency, saw a shift from the dense urban fabric of the city, to the parklands of Cork's Marina and Atlantic Pond on the south bank of the River Lee. Students were asked to design short-term studio space and living accommodation for an artistic practice of their choice. Through the merging of learning across all modules, students had the opportunity in the final project, to demonstrate skills developed over the academic year through the drawing, modelling and verbal presentation of ideas and concepts.
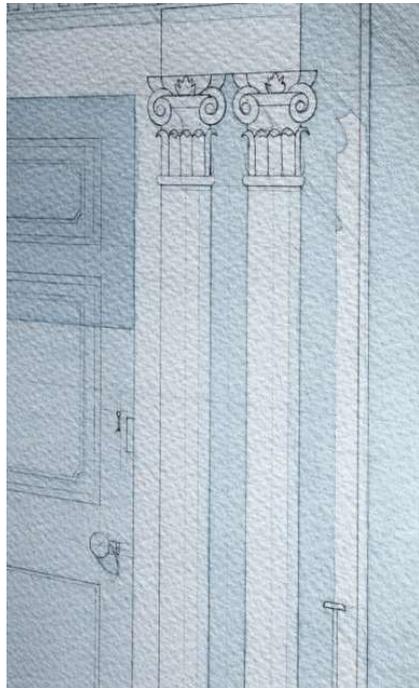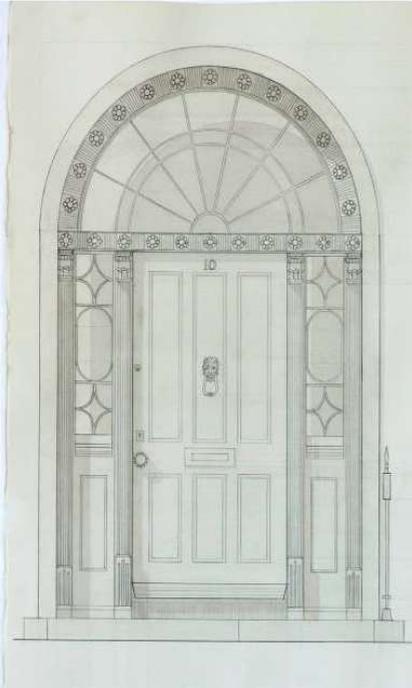
Orla McKeever

Fig 1.05 (top left)
Kamil Labuda, Measured Drawing
Fig 1.06 (top right)
Sean Ahern, Measured Drawing
Fig 1.07 (left)
Abi McCarthy, Measured Drawing
Fig 1.08 (right)
May Lucey, Measured Drawing

Photos by Roseanne Lynch

Fig 1.09-1.14 (opposite, top to bottom)
Light Box Studies (from right): Sean Ahern, Amy Cotter
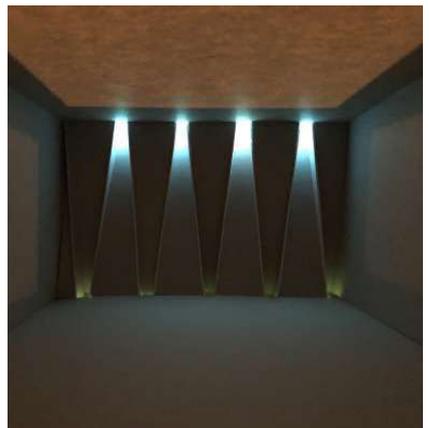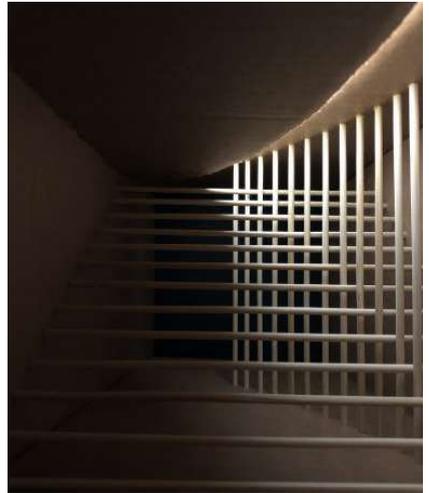Ailish O'Leary, Robin Kiss, Alannah Wade and Abi

Fig 1.15 (top)
Isabelle Shelly, Live Work
Unit, Contextual Section
Fig 1.16 (middle)
Isabelle Shelly, Live Work
Unit, Models
Fig 1.17 (middle)
Isabelle Shelly, Live Work
Unit, Plan
Fig 1.18 and 1.19 (bottom)
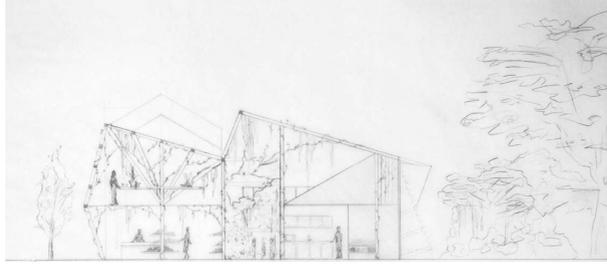Ellie O'Connell and May
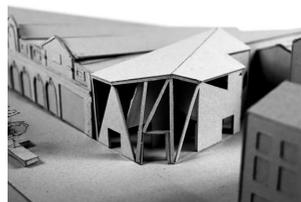Lucey, Live Work Unit,
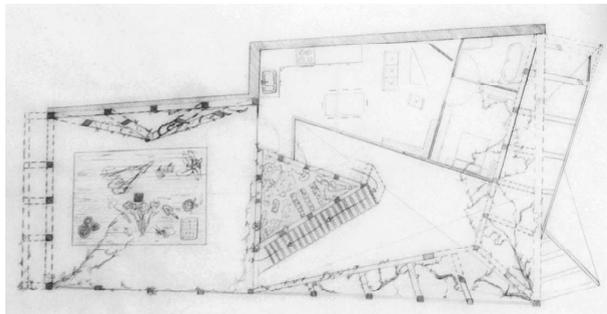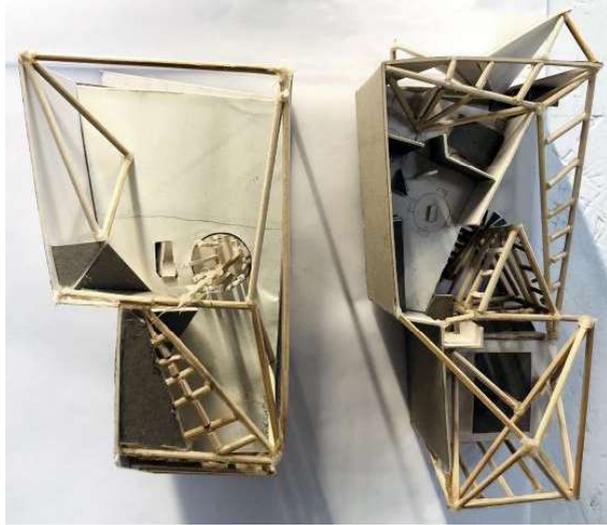Contextual Models

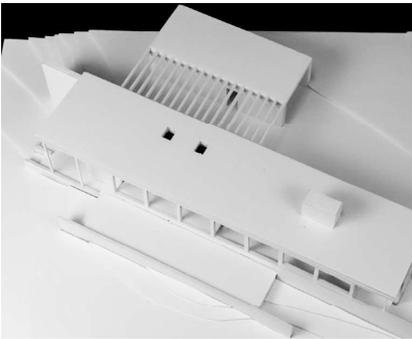**Fig 1.20 (opposite top)**
Tomas O'Hainifein,
Precedent Study, Model
**Fig 1.21 and 1.22
(opposite middle)**
May Lucey and Joey Griffin,
Precedent Study Models
**Fig 1.23 and 1.24
(opposite bottom)**
Class, Precedent Study
Models
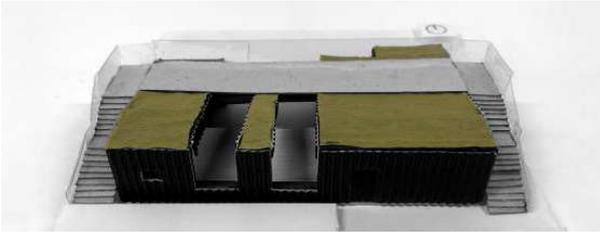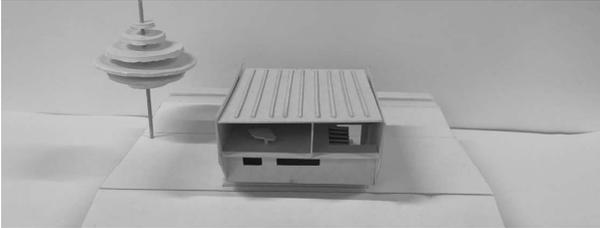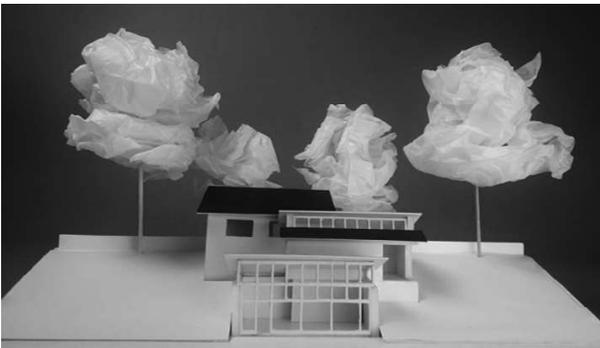
Fig 1.35 (top)
Isabelle Shelly, Artists
Residency, Model
Fig 1.36 (middle)
Ellie O'Connell, Artists
Residency, Contextual Model
Fig 1.37 (middle)
Ellie O'Connell, Artists
Residency, Study Models
Fig 1.38 (bottom)
Ellie O'Connell, Artists
Residency, Model
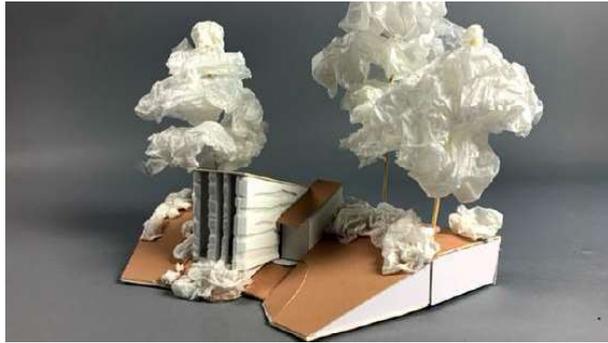
Fig 1.40 and 1.41 (opposite, top)
Ellie O'Connell, Artists
Residency, Section and Map
Detail
Fig 1.42 (opposite, bottom)
Ellie O'Connell, Artists
Residency, Contextual Plan
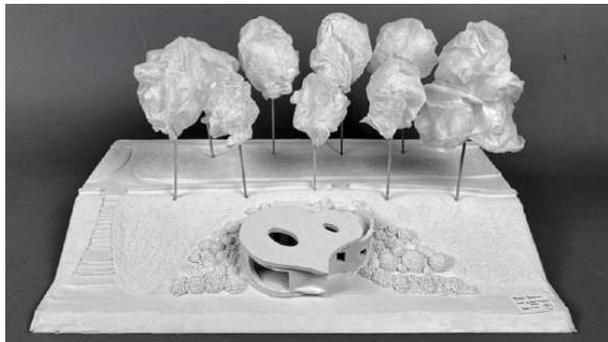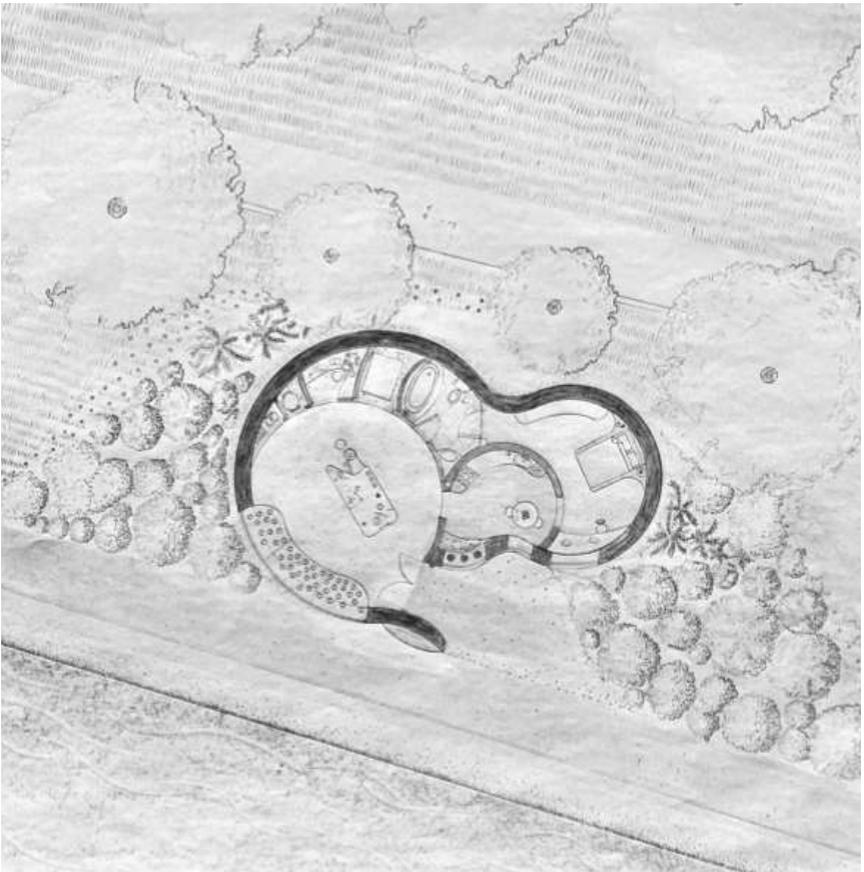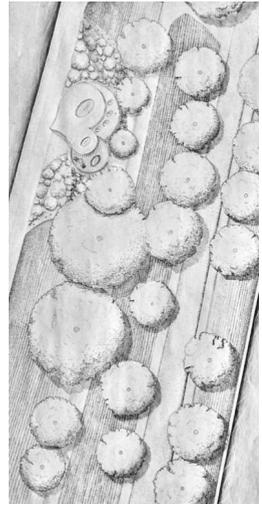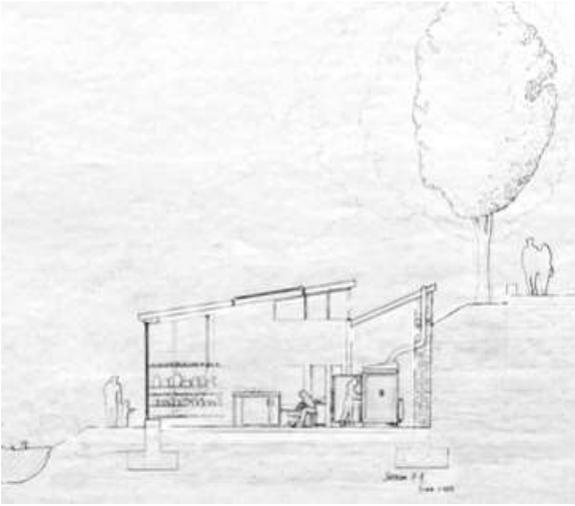
YEAR 02

Year Co-ordinator
Declan Fallon

Design Studio Staff
Tara Kennedy
Una Daly
Dr Jim Harrison
Eoin Horgan
Maroun Tabbal
Niamh Hurley

Applied Technology
Seán O'Muirí
Henrick Wolterstorff

CCAE Workshop
Aoife Browne

Studio Contributers
Ailbhe Cummingham
Linda Horgan
Martin Scaffolding Ltd.
Greg Collins
Shane Jones
Mary Creedon
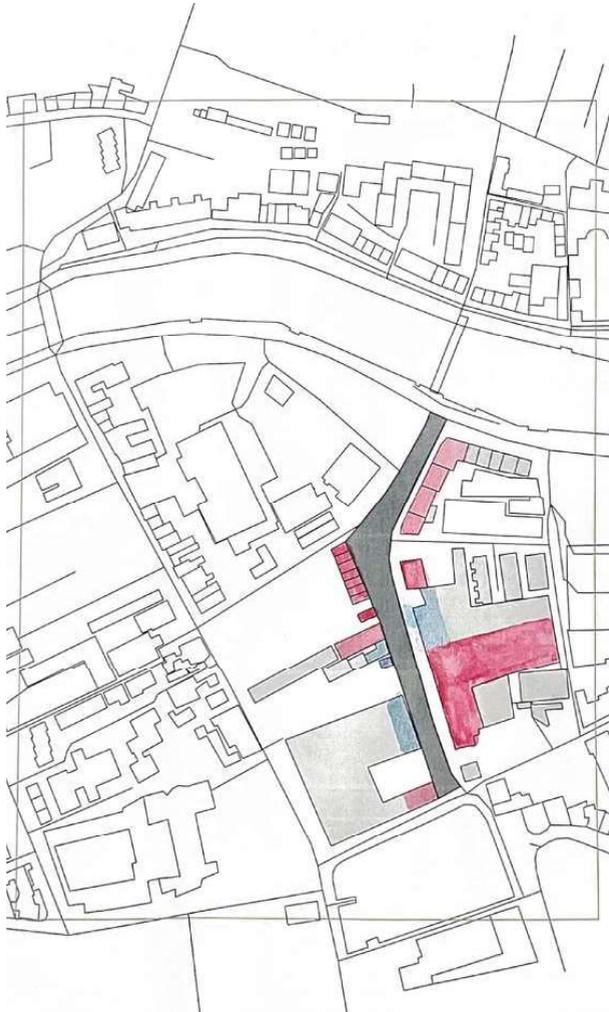
Fig 2.00
Sophie O'Sullivan, Urban
Expedition, Contextual Day
and Night Map
Fig 2.01 (opposite)
Sinead Moynahan, Urban
Expedition, Photo Collage
of Street Elevation
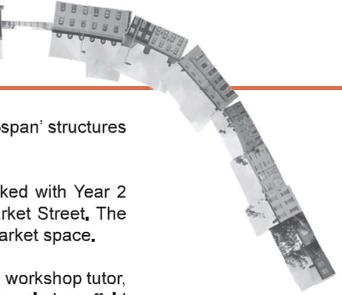
In semester 1, the primary focus in the Design Studio was 'wide-span' structures within an urban context.

We partnered with Ailbhe Cunningham of TEST SITE who worked with Year 2 students to understand the history and development of Cornmarket Street. The brief was to design a building that would reactivate the former market space.

Staying on the the Cornmarket Street site, we worked with CCAE workshop tutor, Aoife Browne, to design and fabricate street furniture using recycled scaffold boards kindly donated by Martin Scaffolding Ltd. Each piece of street furniture was 'tailored' for a specific part of the Cornmarket Street.

In semester 2, Year 2 students were asked to consider the architecture of 'housing' and 'home', its issues and solutions.

We studied our own living environments in minute detail and developed digital drawing skills in 2D draughting. Varying housing types were explored in precedent studies to provide an insight into housing design.

The semester culminated with a design project of a notional housing scheme based in Cape Clear on Sherkin Island. This project was supported by Cork County Council and provided the students with the experience of working for a 'real' client. The flexible housing scheme had to cater for varying age groups, abilities and lifestyles while protecting the context of the site.

CCAE is very grateful for the input and efforts of Greg Collins and Shane Jones (Cork County Council), Mary Creedon who advised on issues of Age Awareness within a domestic environment and Linda Horgan who advised on Universal Housing Design.

Declan Fallon

Fig 2.26
Kevin O'Shea, Market,
Structural Model
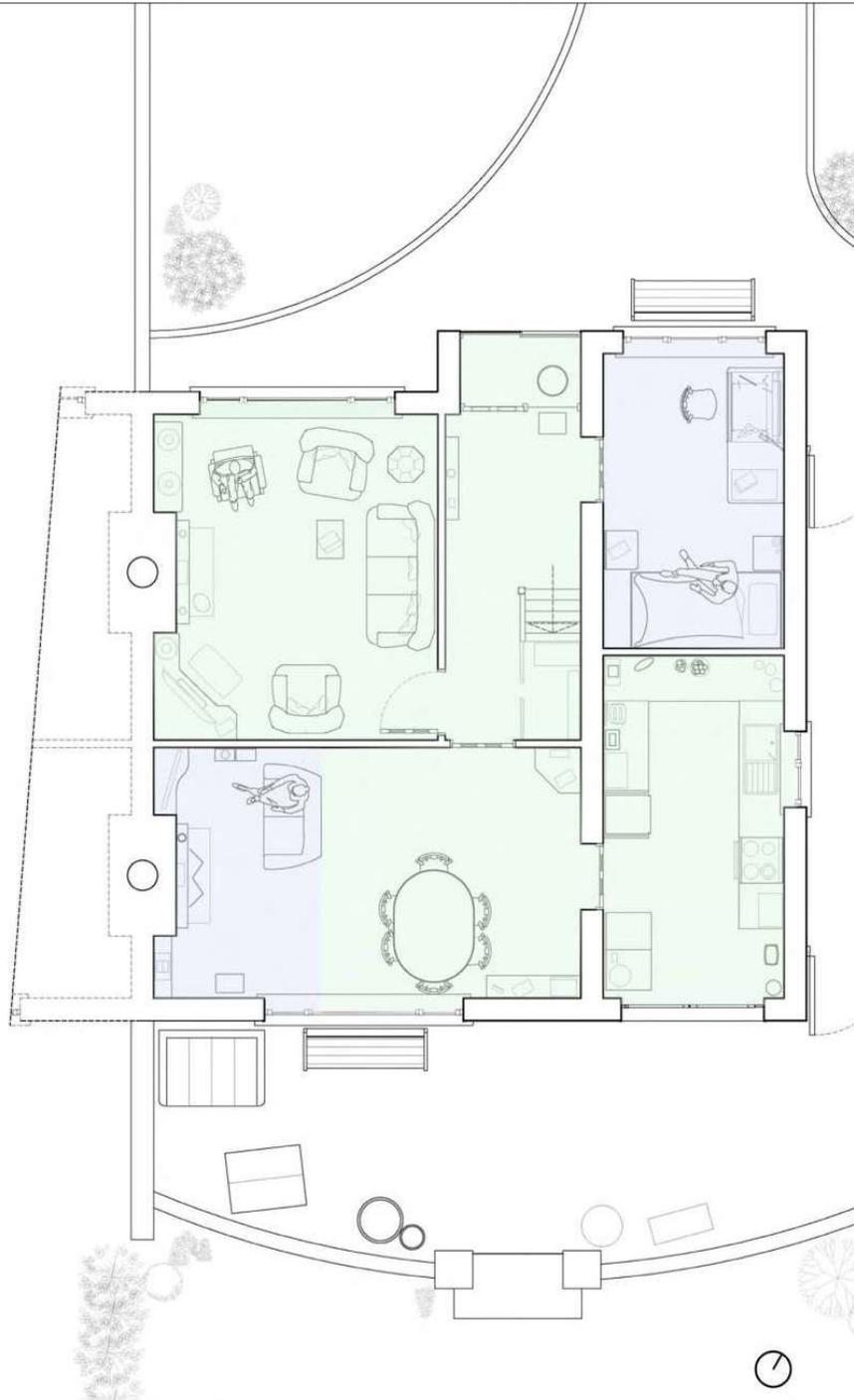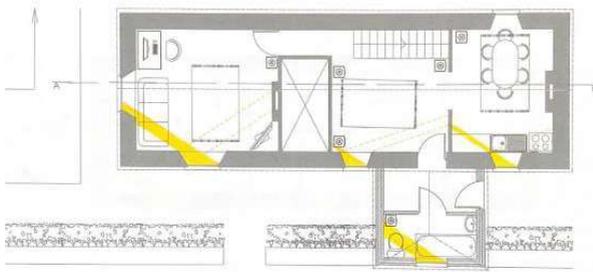
Fig 2.28 (top)
Lucy Byrne, Home, Ground
Floor Plan Morning Sun
Fig 2.29 (middle)
Samuel Greene, Precdent
Study, Model
Fig 2.30 (bottom)
Sinead Moynahan, Precedent
Study, Perspective
Fig 2.31 (bottom)
Megan White, Housing
Precedent Study, Section
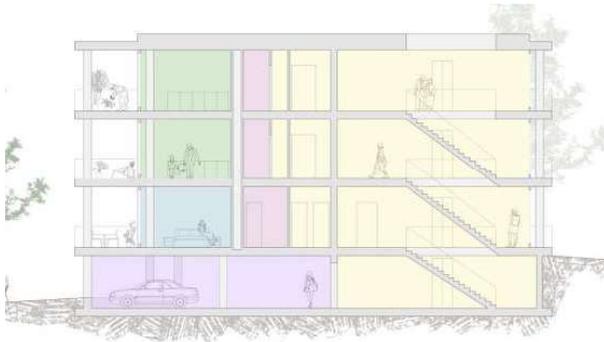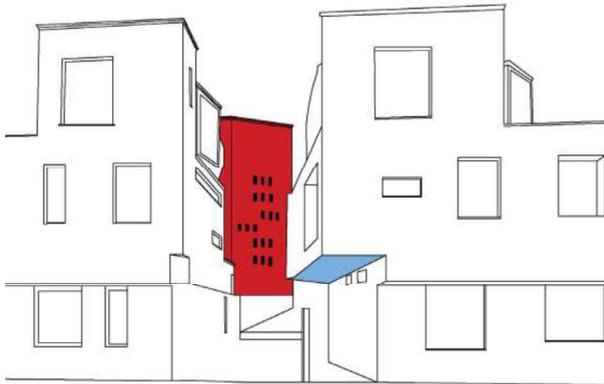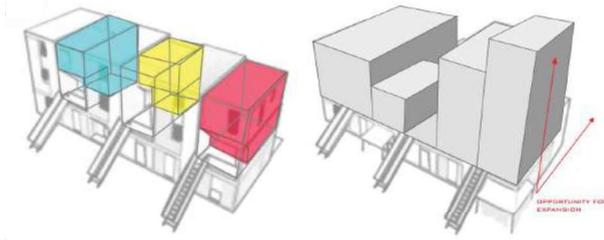
Fig 2.32 (top)
Darragh Bairead, Flexible
Housing, Section
Fig 2.33 (middle)
Lucy Byrne, Flexible Housing,
Contextual Site Plan
Fig 2.34 (bottom)
Darragh Bairead, Flexible
Housing, Contextual Section
Fig 2.35 (bottom)
Lucy Byrne, Flexible Housing,
Contextual Section
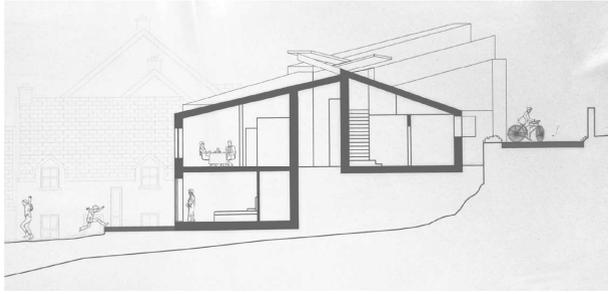
Fig 2.36 (opposite top)
Aoife Cowman, Flexible
Housing, Contextual Model
Fig 2.37 (opposite middle)
Egan Murphy, Flexible Housing,
Contextual Section
Fig 2.38 (opposite bottom)
Aoife Cowman, Flexible
Housing, Contextual Model

Year Co-ordinator
Kevin Busby

Design Studio Staff
Willie Carey
Andrew Lane
Ed Raftery

Applied Technology
Kevin Busby
Paul Carpenter

CCAE Workshop
Aoife Browne

Digital Skills
Niamh Hurley
Michelle Delea
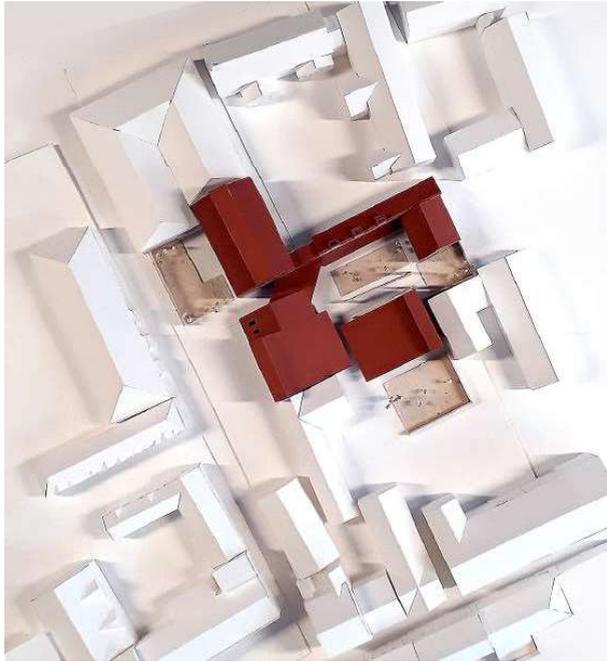
Fig 3.00 and 3.01
Class Models of Bandon

Fig 3.02 (opposite)
Sarah Murphy, Bandon Section
Study

Learning from crisis leads to a different way of learning

With classes returning to studio (albeit masked and socially distanced) and as we negotiated our way out of the pandemic, we commenced with various technical and experiential studies of the CCAE building, leading to a detailed analysis of the wider environment of Nano Nagle Place.

Each year, we try to source 'live' projects, dealing with real buildings projects and real clients. This year we chose the North Cathedral in Cork city for our intervention project, where students were asked to introduce new elements and materials to transform, adapt and enhance the existing space. We were fortunate to have access to the building through the kind assistance of Caitriona Courtney, a former student of CCAE who was carrying out the environmental retrofit of the cathedral at the time.

The nature of the projects in Year 3 continues to provide opportunities to closely integrate the Applied Technology Studio, Conservation, and Environmental Design modules into Design Studio. CCAE also sees Year 3 as an appropriate stage to further integrate digital skills teaching, both in formal 2D draughting and the use of presentation software. While we continue to encourage the ethos of freehand sketching, particularly in the design process, the lessons learned from the pandemic encouraged us to introduce more design software i.e., 3D digital modelling and rendering.

Continuing our connection with real clients, we engaged with Creative Bandon for the remainder of the year, undertaking two projects in the West-Cork town.

The first was the design of a primary school situated on a number of south-facing sites, selected following a mapping exercise of the north-side of the town. The nature of each site provided challenges of topography, materiality, historical context, and opportunities to consider passive environmental design solutions. Students returned to their school scheme in semester 2, looking in greater detail at pairs of classrooms through the spectrum of tectonics and environmental factors. Resultant fine-tuning at this detail level was then incorporated into their original schemes.

The students undertook their final project, the design of an Arts centre, in Bandon town centre. Further investigation revealed a significant number of sites to suit the project programme which was developed with the assistance of Creative Bandon. As with previous years, an important aspect of the project was the making (or remaking) of an on-site public space (place) as an integral element. During the development of this final project, the students were given the opportunity to research a number of public spaces in Venice and with the easing of restrictions, many of the students took the initiative to visit the city for a week in March, in lieu of the annual study field trip we typically facilitate.

Kevin Busby

The chapel of the
Presentation Sisters
Convent in Douglas
Street, now known
as Nano Nagle
Place, was built by
Goldie in 1865.
The chapel served
as a 'chapel of ease'
to serve the growth
of the Catholic
population of the
South Parish. The
chapel design
borrows much from
thirteenth- century
French Romanesque
architecture.

Limestone Cross

Concrete Rendered Sandstone

Stained Glass Window

Limestone Frame Window

Cut Sandstone

Ashlar
Limestone

300mm/12"

3040mm/120"
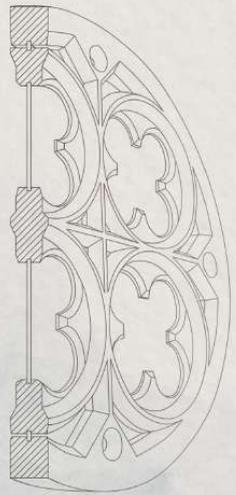
R☩SE WIND☩W

1:20 | AT3002 | DARREN ☩'C☩NN☩R | 119449564
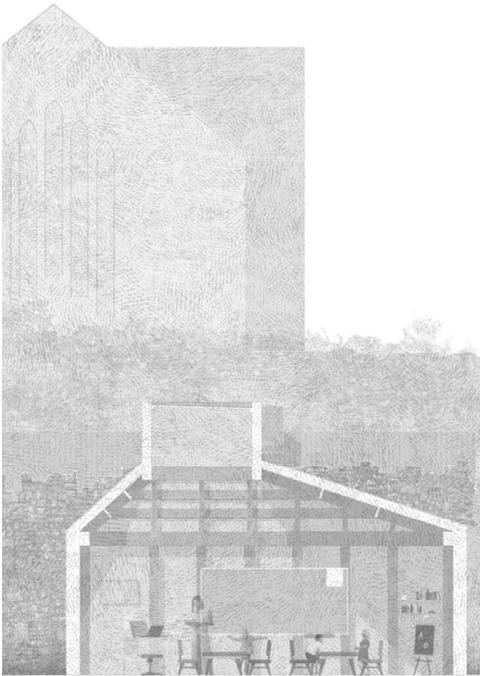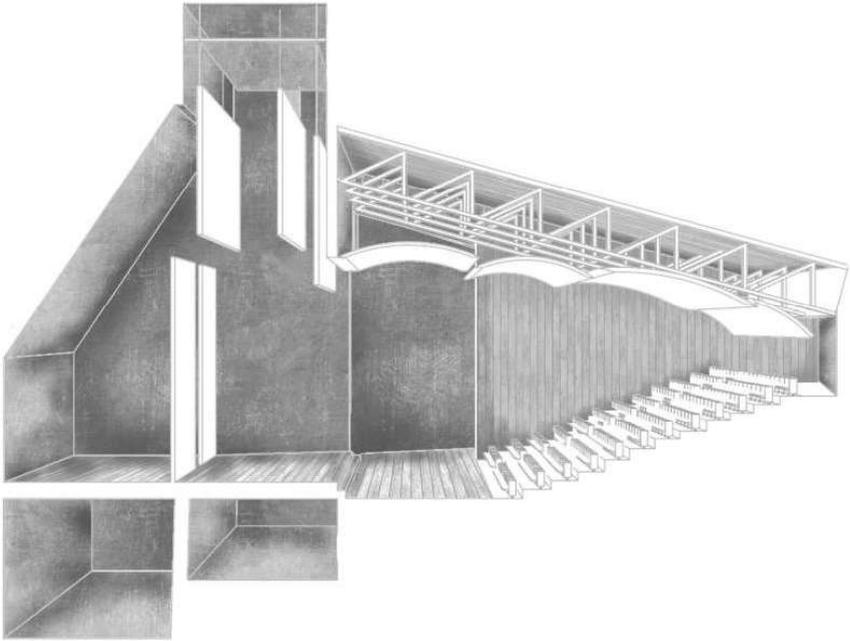
Fig 3.11
Sarah Murphy, Cathedral
Intervention, Sketch Study

Fig 3.12 - 3.16 (opposite)
Various Sections (from top to
bottom):
Daniel Quane
Sarah Murphy
Ciara O'Connell
Róisín Hayes
Jack Creagh

Roofs connected
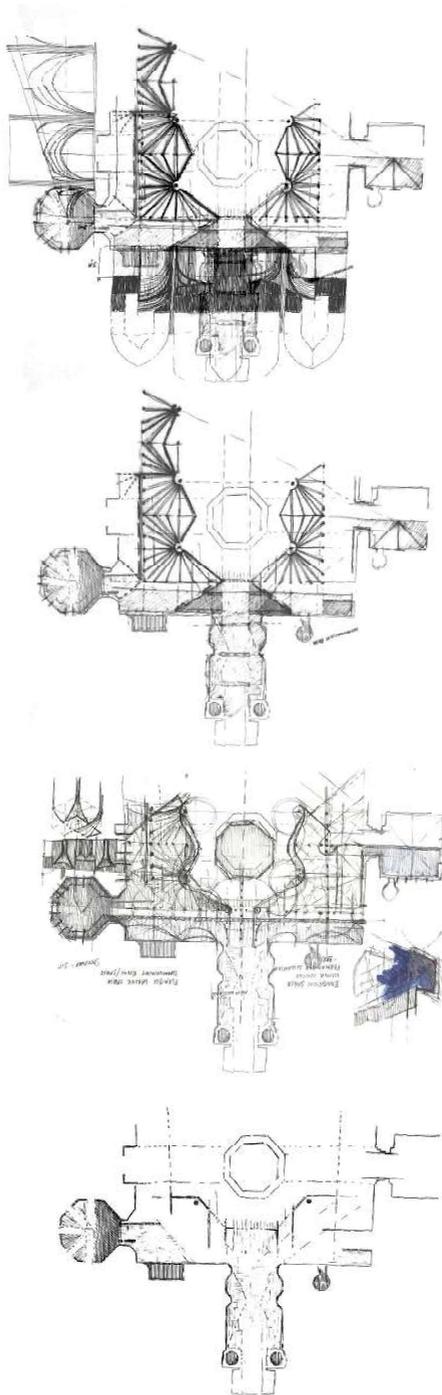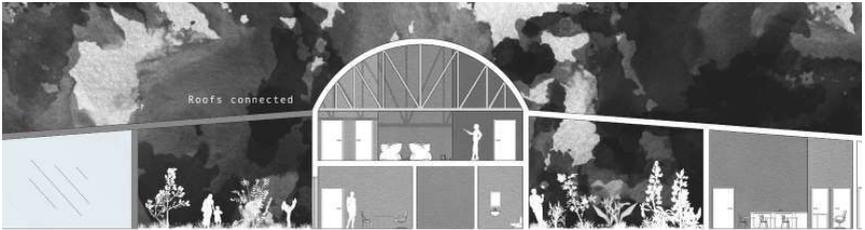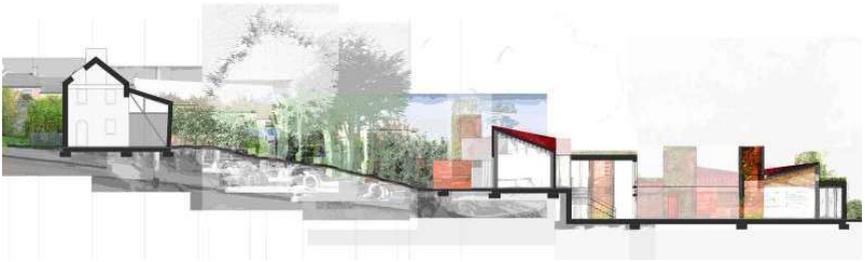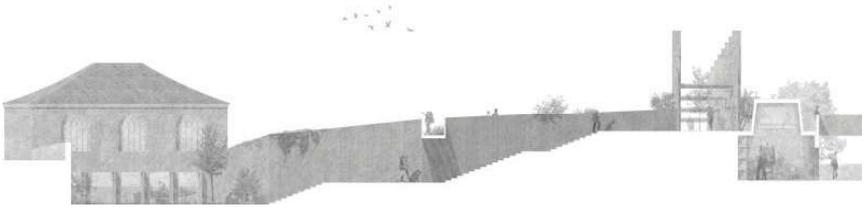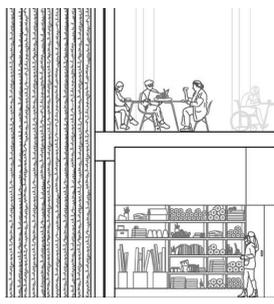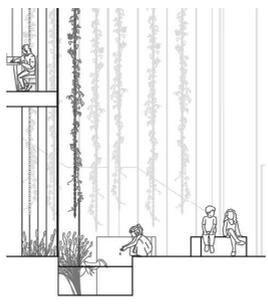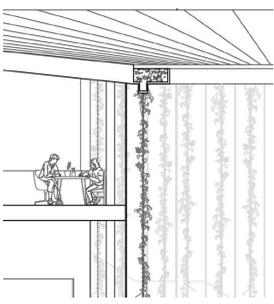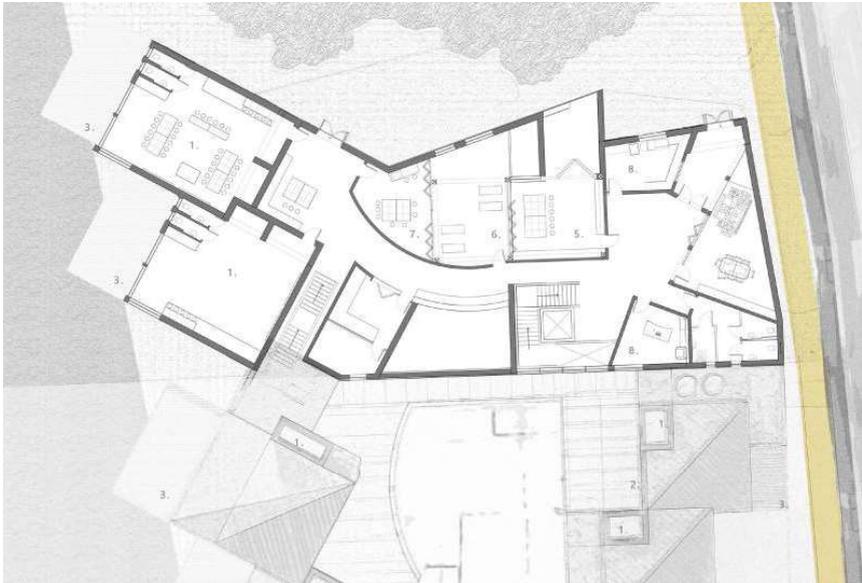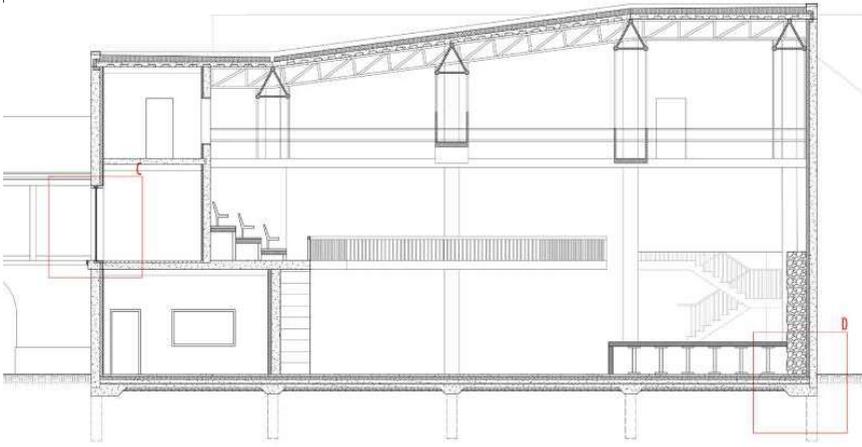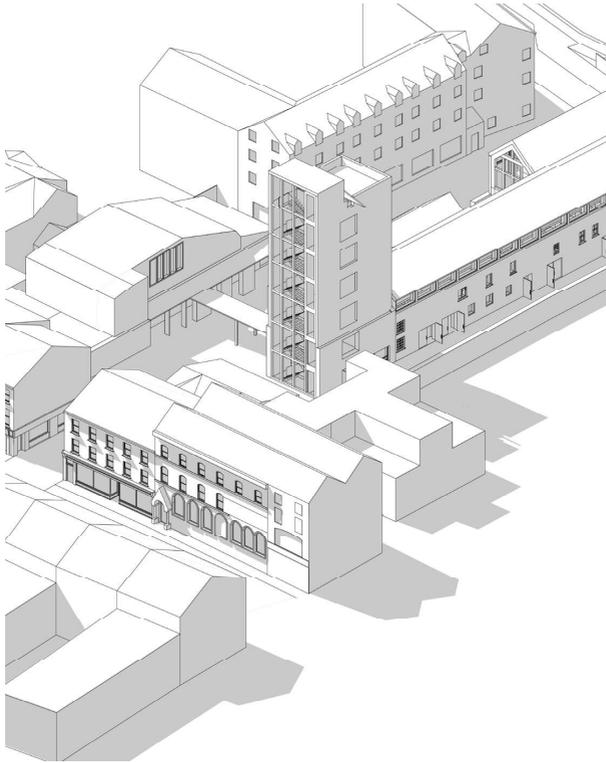
Fig 3.17 (opposite top)
Trelan Zee, Arts Centre,
Technical Section
Fig 3.18 (opposite middle)
Sarah Murphy, School,
Contextual Plan
Fig 3.19 - 3.21 (opposite bottom)
Eimear Aherne, Arts Centre,
Section Details

Fig 3.22 (top)
Grace Kiernan, Arts Centre,
Contextual Model
Fig 3.23 (bottom)
Fionnbharr Hickey, Arts Centre,
Exploded Axo
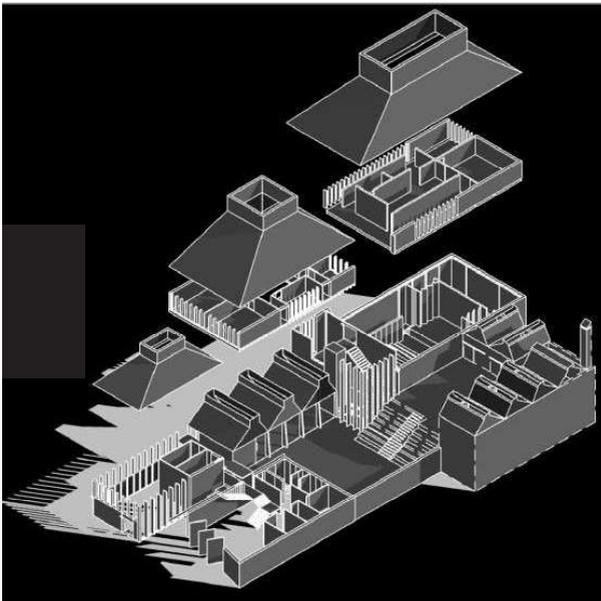
Fig 3.24 (top)
Daniel Roberts, Arts Centre,
Contextual Plan
Fig 3.25 (bottom)
Conor Ryan, Classroom Study,
Section

Fig 3.26 (opposite top)
Darren O'Connor, School,
Technical Section
Fig 3.27 (opposite bottom)
Róisín Hayes, Arts Centre,
Contextual Plan

Fig 3.34
Conor Ryan, School, Contextual Axo
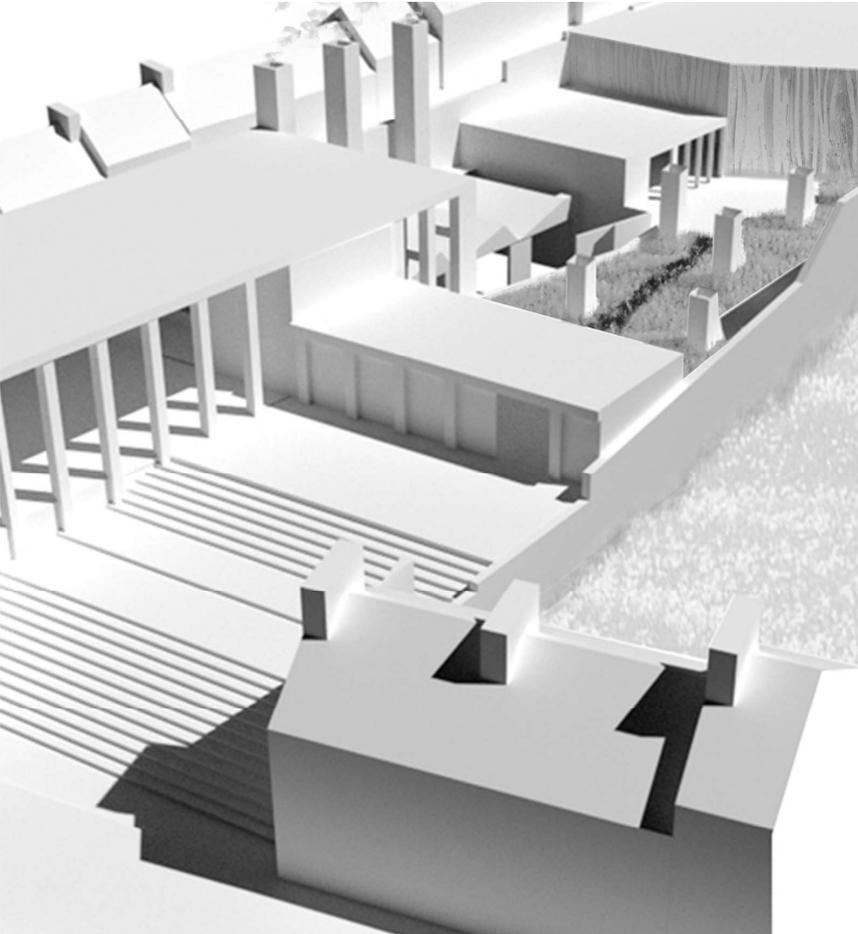
Fig 3.35 (opposite top)
Conor Ryan, Arts Centre, Contextual Section and Exploded Axo
Fig 3.36 (opposite bottom)
Tom Foley, Arts Centre, Contextual Model

Fig 3.37 (top)
Darren O'Connor, Arts Centre, External Theatre Space Perspective
Fig 3.38 (bottom)
Conor Ryan, Arts Centre, Night Perspective

YEAR 04

Year Co-ordinator
John McLaughlin

Design Studio Staff
Caroline Akiboye
Simon Connelly
Nicci Brock
Ruairi Finucane
Joseph Mackey

CCAE Workshop
Aoife Browne

Special Contributors
Daniel Garvey
Conor Hayes
Fergal O'Sullivan
Arup Engineering
Cygnum
Cederlan
Dr Conan O'Ceallaigh
Peter Cody
Miriam Delaney
Kevin Donovan
Tony Duggan
Tiago Faria
David Flannery
Stephen Foley
Michael Kelly
Paul Kelly
David Naessans
Karen McEvoy
Michael Pike
Peter Tansey
Giuila Vallone
St. John Walsh
Will Walsh

Fig 4.0.00
Anisha Yuhhi, UCC, Route
Analysis
Fig 4.0.01
Martha Lyons, Spike Island,
Growth Patterns

Fig 4.0.02 (opposite)
Martha Lyons, Spike Island,
Life Cycle
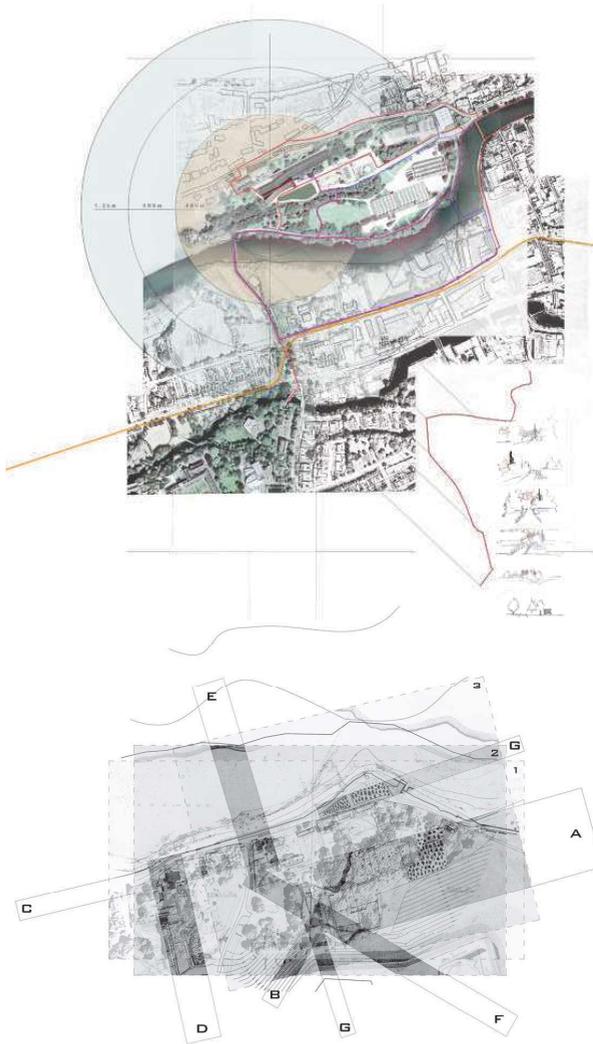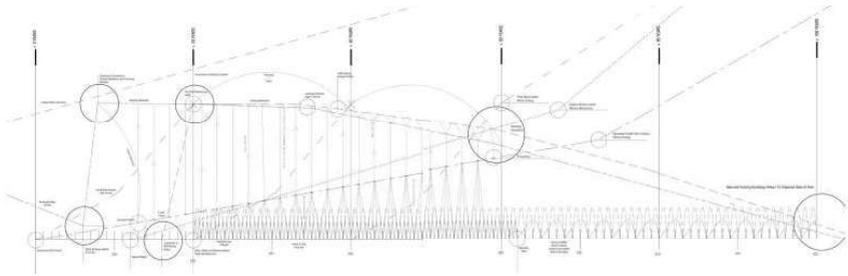
Integration and Practice

Fourth year is a synthesis of the learning from the undergraduate programme where the students are asked to develop a position relating to a studio theme and their own research. The class is organised into three studios which are led by three architecture practices. The students select the studio that appeals to them at the start of the year, and they remain there over both semesters. The thesis project is the culmination of a series of choices that they have made, and the thesis position is a reflection on how to best elaborate their position as budding architects. This year I asked the practices to address issues relating to the current crises under the general thematic of Entropy and Utopia.

The **Only Connect** studio led by Akiboye Connolly Architects engaged directly with environmental issues and asked the students to imagine Cork in the year 2050 when we will have wetter winters and hotter summers. The work of this studio explored scenarios from rising sea levels to the production of food and drink in the urban setting of the city around the south channel of the River Lee.

The **Machine Learning** studio, led by Brock Finucane Architects, took the brief for a new school of engineering for UCC as the starting point for exploring the relationship between the university and Cork City. Students explored the historic development and social contexts to consider ways to develop Cork as a learning city. Their work acts as a testbed for new cultural and tectonic relationships within Cork

The studio **Of Memory** was led by Joseph Mackey Architects, and they took texts by the philosopher Michel Foucault and architecture theorist Sebastien Marot as lenses through which they looked at Spike Island in Cork Harbour. Foucault's text introduces the concept of heterotopia as a space apart, and the island with its rich histories proved to be a treasure trove of heterotopic spaces. The theme of Memory led to rich readings of the places and of ways that their changes over time could become the means of their own renewal.

We place a strong emphasis on the integration of technical and environmental thinking into the student's design projects. They are acutely aware of the growing environmental challenges associated with climate change and many of the designs address these directly or obliquely through the choice of theme or programme. We were very fortunate to have contributions from Daniel Garvey, Conor Hayes, and Fergal O'Sullivan, from Arup engineering and environmental consultants on technical matters. We also connected with leading Cork-based timber frame producers Cygnum and Cederlan as well as Dr Conan O'Ceallaigh of the Timber Engineering Research Group from NUI Galway, and gained insight into modern construction methods on our visit to Cygnum's factory in Macroom. These research and industrial inputs added hugely to the student's learning as they experienced a range of design team inputs for the first time. We are extremely appreciative of these partners and their contributions to our course.

We were very fortunate to have so many visiting contributors to our design reviews and workshops from leading academics and practitioners and I would particularly like to thank; Peter Cody, Miriam Delaney, Kevin Donovan, Tony Duggan, Tiago Faria, David Flannery, Stephen Foley, Michael Kelly, Paul Kelly, David Naessens, Karen McEvoy, Michael Pike, Peter Tansey, Giulia Vallone, St. John Walsh, and Will Walsh, along with many of my colleagues here in CCAE, for their generous advice to the students.

John McLaughlin.
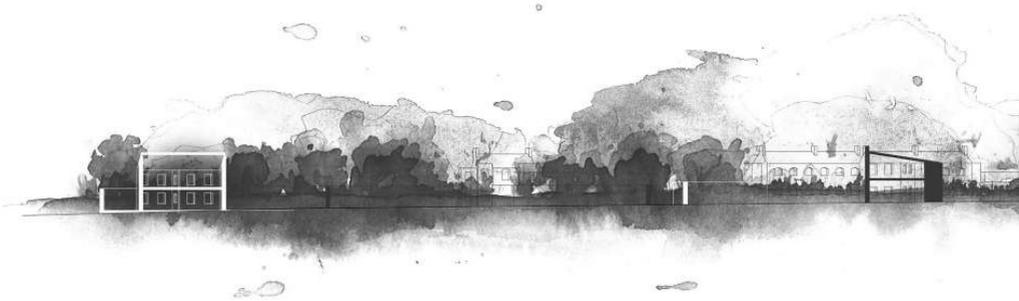
Entropy + Utopia

The Second Law of Thermodynamics states that the entropy of an isolated system never decreases over time. Such systems spontaneously evolve towards thermodynamic equilibrium, the state with maximum entropy. Because it is determined by the number of random microstates, entropy is related to the amount of additional information needed to specify the exact physical state of a system, given its macroscopic specification. For this reason, it is often said that entropy is an expression of the disorder, or randomness of a system, or of the lack of information about it. The concept of entropy plays a central role in information theory.

While science can make predictions about simple closed systems, predictions rapidly become more complex, and less predictable in complex systems, which is why the term has acquired the connotations of disorder and randomness in more recent usage. This sense of the term makes it useful for us in considering the vastness and complexity of an issue such as climate change. Since every action has consequences for other parts of our system, it becomes increasingly difficult to determine how best to act.

One of the salient aspects of this complexity is the way in which richer societies that live in more temperate regions of the globe pay a much lower price as a consequence of their in/actions than poorer societies closer to the tropics and equator. This disparity of consequences is referred to by the term "climate justice" which tried to draw out the social injustices associated with these inequitable effects. The former President of Ireland, Mary Robinson wrote a book about this titled Climate Justice, that considers the emerging problems that face us as we approach a predicted global population of nine billion people by mid-century.

In an art context the term entropy became popular in late 1960s New York when the artist Robert Smithson used the term entropy in reference to his contemporaries, the minimalist artists Donald Judd, Sol LeWitt, Dan Flavin, and Larry Bell, whose highly simplified and static work he considered embodied the concept. Smithson identified the term with the increasing alienation experienced under the Nixon era in America that has many similarities with our own. Today a number of commentators have commented on the "political entropy" and "social entropy" evidenced by the increased fragmentation of society and the absence of political consensus.

The concepts of socio-political entropy and thermodynamic entropy both lead to disorder in world systems and these are reflected in prioritisation of self-interest over the greater good, reflected in political movements like America first, and Brexit on the one hand, and the increasing instability and disorder in financial markets, weather systems, and an increase in violence.

As architects our job is to imagine a better world, a utopia even. The idea of utopia lost currency with the demise of the modern movement which had sought to create a better world and the assumption that the better world that it had created would continue on regardless. We operate in the reverse sphere to entropy, creating structure, order, and hoping for a better world. Some thinkers have called this life impulse "neg-entropy" to suggest the structure of order out of chaos. In scientific terms it is the energy added to a system by an external source like the sun. The corollary of this is the inspiration that we find in dissipation and ruins. In the eighteenth century the ruins of ancient Greece and Rome provided inspiration for new architecture but also prompted the development of new democratic political structures in America and France.

Fig 4.0.03 (top)
Martha Lyons, Spike Island, Site Section

Fig 4.0.04 (opposite)
Caimin Muldoon, Spike Island, Contextual Floor Plan

46
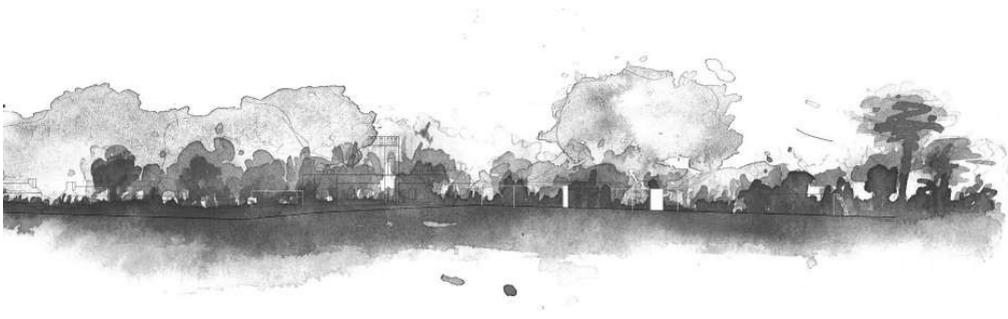
In social terms, the utopian principle remains important to us, even if we know that it is difficult to imagine. The Belgian theorist Hilde Heynen has written – "As David Harvey remarks in Spaces of Hope, it is only by revitalising the utopian tradition that we will be able to fuel a critical reflection that will help us to act as conscious architects of our fates rather than as helpless puppets of the institutions and imaginative worlds that we inhabit. There are vested interests that want us to believe that "there is no alternative" to the world as it is organised today, with a globalised capitalist system that has far-reaching and seemingly inevitable effects, ranging from the necessity of child labour in upcoming economies in the East, to the spread of unemployment and urban decay in the West, not to forget the poorest countries in the South. Therefore if we are not willing to support the status quo, we should recognise the need for a revitalisation of utopianism, because it is the only strategy that enables us to sound the depths of our imagination in order to explore the possibilities of the "not yet".

Modernist architects and urbanists have contributed a great deal to utopian thinking in the twentieth century. Rather than blame them we should admire their courage to recognise and elaborate the political dimension of their architectural beliefs. We should not turn a blind eye to the unavoidable problems that are intrinsic to any utopianism that takes a spatial form….We should question the all to easy solution of simply doing away with utopian thinking because of its built-in tendency to turn into its opposite and because of its totalitarian aspects. After all, it is through utopian thinking that we train ourselves in imagining a better architecture that would correspond to an alternative and better world."

While the twentieth century modernist architectural vision was predicated on limitless means, particularly oil and concrete, we must reimagine not just architecture, but the whole system of production underpinning architecture, based on as few means as possible. We must find ways to tread more lightly on the earth. This has to go beyond building regulations and compliance, to embrace a whole restructuring of the production of space. Taking inspiration from these challenges, the theme of our year is Entropy + Utopia with the ambition of imagining a different world from the chaotic entropy of the present moment.
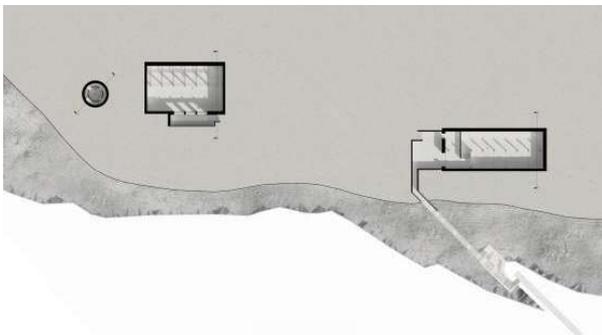
References
Bruno Latour (2017) *Facing Gaia: Eight Lectures on the New Climatic Regime*

Hilde Heynen (2022) *Team 10, Towards a Utopia of the Present*

Mary Robinson (2018) *Climate Justice*

Robert Smithson (1969) *Entropy and the New Monuments*

DISSERTATION

Module Coordinator
Tara Kennedy

Dissertation Tutors
Kate Buckley
Kieran Cremin
Dr Danielle O'Donovan
Tara Kennedy
Jack Lehane
Dr Jim Harrison
Orla McKeever
Dr Samuel Vardy
Dr Sarah Mulrooney

Contributors
Irish Architectural Archive
Prof Gary A. Boyd
Maroun Tabbal
Henrietta Williams
Albena Yaneva

The Dissertation is an opportunity to experience architectural research and to study in-depth a specific field of interest. Sparked by eight thematic tutor-led groups, subjects in 2021.22 ranged across studies of significant buildings and architects; representationsof architecture in the visual and literary arts; alternative architectural and related art practices; wider social, cultural and theoretical investigations; historical studies. Approaches included primary archival research; critical and reflexive engagements withdesign; qualitative and ethnographic/interview-based research methods; philosophical, ecological, aesthetic interpretations; critical histories of technology. In all cases there must be a focus on the importance of the written word to communicate ideas about the built environment, supported by visual illustration. The dissertation research was supported by lectures and workshops. Students also presented their research at a Dissertation Symposium in February, airing their work to their peers for wider discussion and engagement with the value of writing as practice.

Tara Kennedy

Right to the City

Kate Buckley

Public space, and streets are complex material objects that are used for work, worship, to live in, socialise and play. They have the power to connect the present with the past. They are places where the repetition of everyday activities can become charged with significance, invoking memories of people and events. Public space is arguably a common good whose problematic should always be a question. Cities and their streets have become spaces for creative dissent, debate and questioning. They are key to understanding and perceiving the urban fabric and urban life. This dissertation group provides a framework for the description, experience, critical analysis and discussion of the street, public space and the city. We will investigate how they can be adapted and appropriated by various users and question who should inform how cities take shape?

The Space of Violence

Kieran Cremin

Few topics are as provocative and relevant as violence. Problematic and mercurial in its representation, violence continues to be a prominent theme within all forms of media while being multi-varied in its psychological and spatial articulation – from the graphic splendor of a Quentin Tarantino film to the invisible, but physical, forces of a radioactive environment. The thematic interests of this seminar group are concerned with the phenomenon of barely perceptible violence, considered here under the term 'psycho-spatial.' This seminar group will explore social attitudes towards this type of violence and examine its categorisation within the spatial operation of architecture. Exploring our ability to designate spaces and atmospheres considered to exude such an aura, we will ask: can architecture constitute an act of violence against the well-being of the body? Ultimately, these explorations will provoke and speculate on the question: what is 'violence'?

Gothic Survival, Revival and Reuse

Dr. Danielle O'Donovan

From its origin over 800 years ago, Gothic architecture has survived, been revived and has been continually restored. Although we have scant examples of medieval Gothic in Cork City, we have a stunning assemblage of Gothic Revival buildings. If we also include Gothic buildings in the Cork county we have arguably one of the greatest assemblages of high-quality Gothic Revival architecture in the world. What better place to explore the genius of Gothic? In this module we will thematically explore Gothic architecture by critically appraising approaches to the analysis and understanding of the style. We will explore the reasoning behind the revival of Gothic architecture and the methods used to 'revive' the Gothic style, along with the theorizing of Gothic in the 19th Century. We will think about the evolving function of Gothic ecclesiastical buildings in an increasingly secular world. The module will encompass site visits and hands on practical work, along with critical appraisal of primary and secondary sources.

Taking Care

Tara Kennedy

This dissertation group will research how social structures are maintained and can be questioned through architecture. We will discuss places, projects and practises that set up new forms of social framework, work that inherently questions status quo and that considers developing new theories of social organisation and civic engagement as part of the possibility of compelling architecture and spatial practice. Architecture is about building, but also the negotiation, politics, relationships and situations that surround the making and inhabiting of buildings. We will think together about how design makes visible social and political structures that might otherwise be invisible. In particular we will research the politics of care and how these might overlap with questions of design in this era of radical global change.

Participation and Praxis : Other Ways of 'Doing' Architecture

Jack Lehane

Architecture is almost exclusively understood in its built form, and often following typical or mainstream procurement processes. As a result, alternative processes for creating architecture are often overlooked. There is much less research into knowledge practices, or social processes, in architecture than the actual physical forms that they create. The evident need for such understanding opens up the avenue for the primary focus of this seminar group — to invite you to engage architecture as both a process and a product, through the lens of alternative Communities of Practice (CoP). This group foregrounds real-world examples of counter-narratives to the status quo — the key themes of which will be discussed in a group format. What can emerging Communities of Practice (CoP) teach us about how we (co)create architecture?

Sense and Sensitivity: User-friendliness, the Sensory, and Space

Dr Jim Harrison

Understanding human experience and the way in which all our senses respond to a number of external stimuli are essential elements in successful design, not only in the built environment but also in other forms of design, literature and the arts. This can be through recognition of space, appropriate acoustics or levels of lighting, or 'userfriendliness', as well as in the added and often intangible value of aesthetic quality – 'Venustas' or delight as defined by Vitruvius and others. Appreciation of the way in which painting and sculpture have influenced and extended the designer's palette, for example, can help in gaining a better understanding of many of the major architectural movements in recent times.

Contested Space / Cities in Conflict

Orla McKeever / Dr Samuel Vardy

This seminar group will consider what we define as conflict within the built environment and how it impacts on how we negotiate the city? We will look at what happens to the urban fabric when conflict occurs? Through the investigation of international precedents, an awareness of overt tactics that assert control will be developed, however, the central focus of the group aims to identify and investigate the more nuanced invisible borders that contain and corral our use of public space. The group will investigate the phenomenological experience of place and explore the use of ethnographical methods in the experience, observation and documentation of primary research. We will consider if literary or artistic representations of conflict of the urban sphere help us understand the dynamics of violence and ask the question, is it possible to decommission divisions within the mind?

Pedagogy & (Outer) Space: Imagining New Learning Spaces

Dr Sarah Mulrooney

Last summer, CCAE students and staff collaborated on a pavilion and exhibition at Blackrock Castle Observatory, MTU. The pavilion was populated with space-themed art and architectural works and was a learning space for children and the wider community. The interdisciplinary team that built the structure learned from this experience of bringing a project from paper to reality and working within a tight time frame. This dissertation group continues this work by expanding on research about learning spaces at MTU and UCC. The group is interested in the following themes: student design-build projects and exhibitions; the relationship between astronomy and architecture; ideas of modular, adaptive, mobile and demountable learning spaces. This dissertation group runs in parallel with two projects funded by MTU's Teaching and Learning Unit: CCAE Year 1 'maker project' and 'Learning Spaces Learning Community'. UCC Learning Spaces committe is also linked with this dissertation group.

ONLY CONNECT

Unit Leaders
Caroline Akiboye
Simon Conolly

Year Co-ordinator
John McLaughlin

Students
Angela Agrito
Annie Baker
Ben Kingston
Jia Hao Low
Xiangyu Li
Alice McCarthy
Kelly O'Gorman
Katie Reilly
Klaudia Stasiak
Sam Williamson

The year is 2050. Cork's climate now suffers regular stormy wet winter weather, and long hot dry spells in summer. EU Directives now require every new building project to be totally self-sufficient in energy and water use; the new Mayor of Cork, who is part-funding your project, wishes to promote exemplary projects whose carbon footprint is measured and minimized in both initial construction and life cycle, as well as being zero energy/carbon-neutral in operation. The emerging generation of architects must be equipped to understand and respond constructively in their practice to these environmental imperatives, and the concomitant social issues.

only connect present - future
individual - group - society
space syntax - legibility, accessibility
public - private
scale - local - global
above - below: super/infra-structure
to design for: healthy, biodiverse, self-sustaining, urban living
climate: - hot summers, wet stormy winters, flooding
energy, material resources, environmental footprint
building self-sufficiency in energy and water
intelligently responsive architecture

Semester 1

Focused on research. investigating the existing south west quarter of the city centre - Grand Parade and Washington Street south to the school of architecture and west to St Fin Barre's Cathedral - examining surveying techniques to assess physical and social characteristics such as topography, building forms, protected structures and dereliction, population and housing, multiple building uses, biodiversity, green spaces and the effect of trees and plants on atmospheric pollution, family support facilities, food distribution and food miles, flooding , groundwater and climate change, the historic growth of the city enclosing and canalising river courses, transport - pedestrian and cycle routes - and accessibility, including to key visitor sites, street lighting and security, noise in the city centre, homelessness and provision of meals to the homeless.

This research exposed shortcomings and hence opportunities for proposing remedial interventions. These proposals led to a proposition for a major building project in Semester 2.

Semester 2

Projects included:
– Proposals for a transport hub for local shared/public shuttle buses, bikes, electric taxis, river taxis
– Co-working spaces, apartments and studios with shared facilities]
– Local boat building crafts employment with teaching and café
– Food growing, productive landscape, food market, cafés, restaurants and a cookery school
– Art galley with associated public sculpture courtyard and connecting routes
– Museum of Elizabeth Fort and St Fin Barre's cathedral.
– Community cultural centre with library and workshops
– City centre high density housing with social/cultural facilities
– Local servicing transport by reinstated canals. Housing for homeless with communal and support facilities

Fig 4.1.00 (opposite top)
Jia Hao Low, Brewery Quarter,
Site Analysis Contour Map
Fig 4.1.01 (opposite bottom)
Xiangyu Li, St Fin Barre's
and Elizabeth Fort Area, Site
Analysis Map
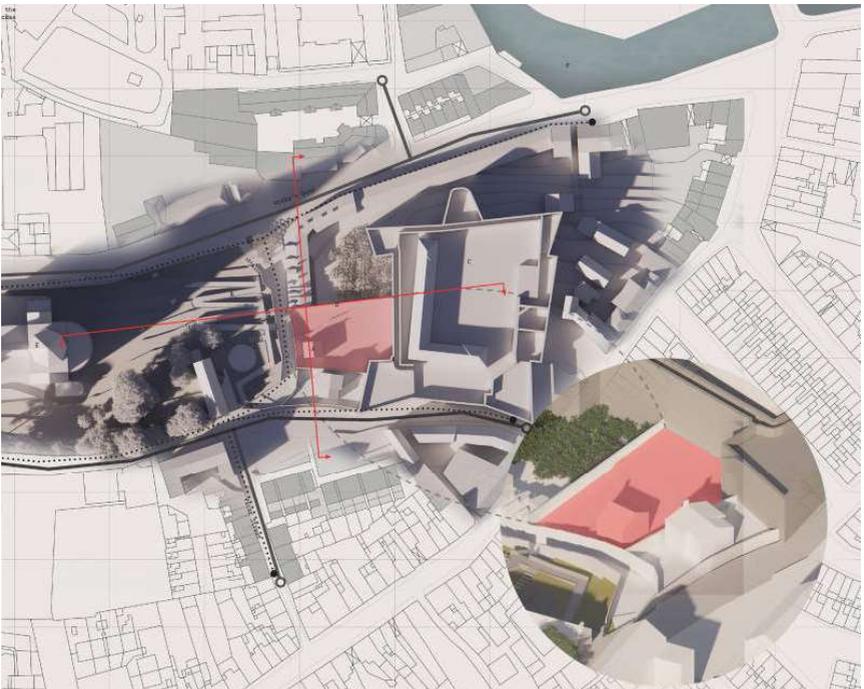
Many of the projects were based on the control of flood risk by the construction of a tidal barrier to control city centre water levels, as the OPW flood mitigation proposals appear to be of limited long term effectiveness. Guidance was given to students on carbon footprinting tools, natural ventilation and responsive environmental control techniques, thermal energy storage, etc., to integrate such techniques seamlessly into their design work.

KLAU
ANNIE

KELLY O'GORMAN

JIA HAO LOW

ALICE MCCARTHY

BEN KINGSTON

KATIE REILLY

ANGELA AGRITO

XIANGYU LI

DIA STASIAK

BAKER

SAM WILLIAMSON

CORK CENTRE FOR
ARCHITECTURAL
EDUCATION (CCAE)

ANGELA
AGRITO

**Brewery Quarter
Library & Canal
Restoration**

A reinstated canal corridor on
Grand Parade serves as an
access point into the proposed
library's site on South Main
Street. This project is designed
to be an urban hub facilitating
the main library, a workshop,
exhibition space and inner
courtyard. The intention was to
reactivate the library as a
community forum and increase
connectivity along the river
edge.

LANEWAY EXPANSION

MAIN LIBRARY

Fig 4.1.03 and 4.1.04 (top)
Angela Agrito, Library
Perspectives
**Fig 4.1.05 (opposite top)
bottom)**
Angela Agrito, Canal
Intervention, Perspective
Fig 4.1.06 and 4.1.07 (bottom)
Angela Agrito, Library, Sectional
Perspective and Contextual

COURTYARD GARDEN

OLD CITY WALL   ARCADE   RIVER BOARD WALK
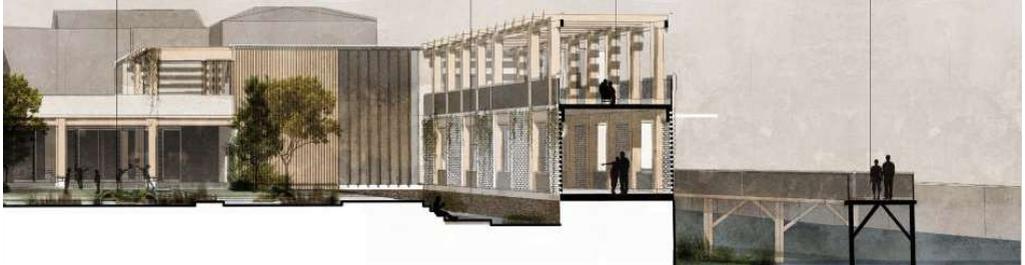
**Meitheal Mara:
Water, Light and
Movement**

Situated along the bank of the
River Lee, this project expands
Meitheal Mara boatyard and
provides a greater link between
Cork and the river, playing
with light to emphasise the
connection between the site and
the water. The design provides
a bigger workshop, teaching
space and rowing facilities for
Meitheal Mara, and includes
a cafe, an exhibition space
and a shop to allow the public
to use the site and interact
with the boat workshop. The
site provides public and green
spaces, promoting outdoors
and more sustainable ways of
experiencing Cork city.
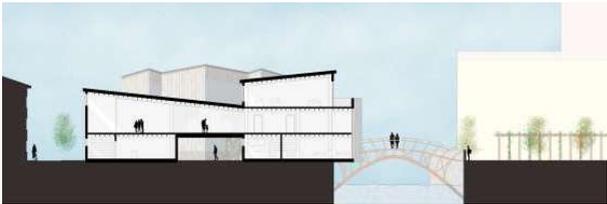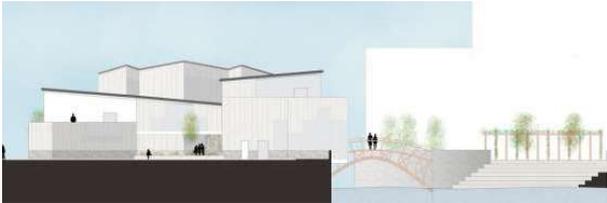
Fig 4.1.08 (opposite)
Angela Agrito, Canal
Intervention, Contextual Axo

Fig 4.1.09 (top)
Annie Baker, Meitheal Mara,
Contextual Plan
Fig 4.1.10 - 4.1.12 (bottom)
Annie Baker, Meitheal Mara,
Assorted Sections and

JIA HAO LOW

**Museum for Elizabeth Fort
& St Fin Barre's Cathedral**

By using the ramping system, it allows everybody to get to the museum much easier. The museum is specifically designed to exhibit and introduce the two historical monuments of Cork, Elizabeth Fort and St Fin Barre's Cathedral. It is also an opportunity to see the works done by William Burges who designed the St Fin Barre's Cathedral.
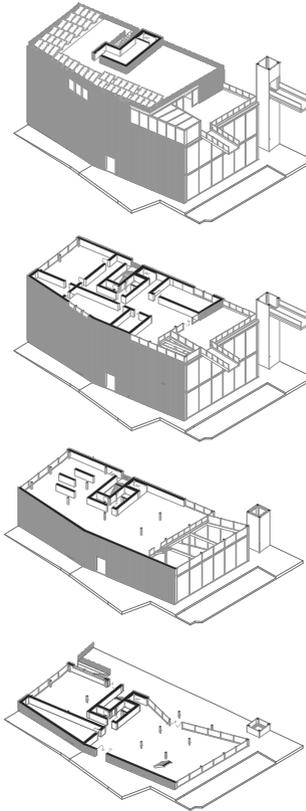
Fig 4.1.13 - 4.1.15 (top)
Jia Hao Low, Museum, Axo and Perspectives
Fig 4.1.16 (bottom)
Jia Hao Low, Museum, Site and Building Model

Social Regeneration on Cork's Canals

As part of my design thesis, I wanted to re-establish Cork City's canal system. This canal system would lead to a significant increase in biodiversity and lower average temperatures in the city. This re-purposing of waterways would be followed up with my scheme for a multi-functional building on Washington Street. This building would act as a new hub for the residents of the city centre.

XIANGYU LI

Contemporary Art Gallery

This gallery would support the education and professional displays of Crawford College of Art and Design. It is also a place to display different types of contemporary art by artists. This gallery will be an opportunity for young artists to exhibit their works.
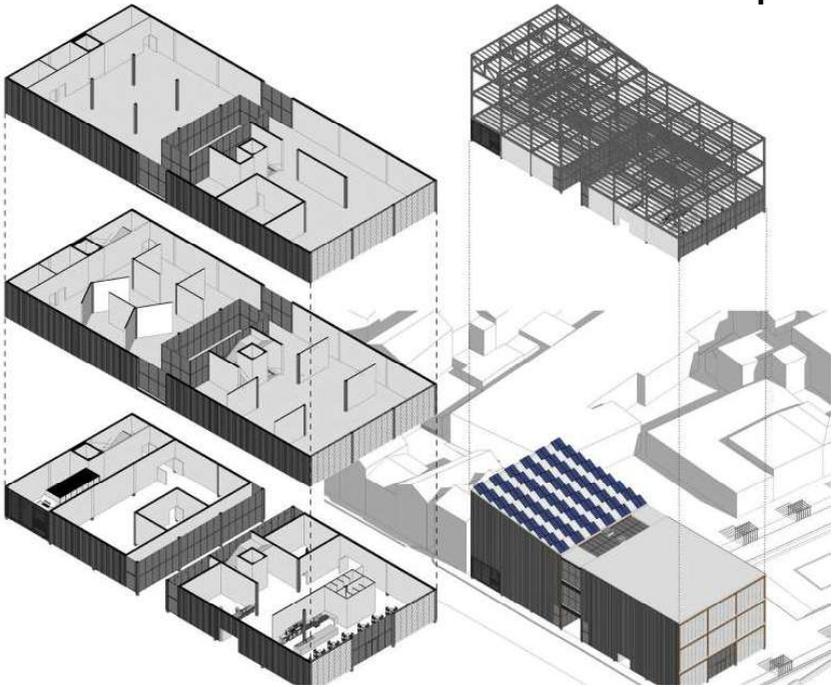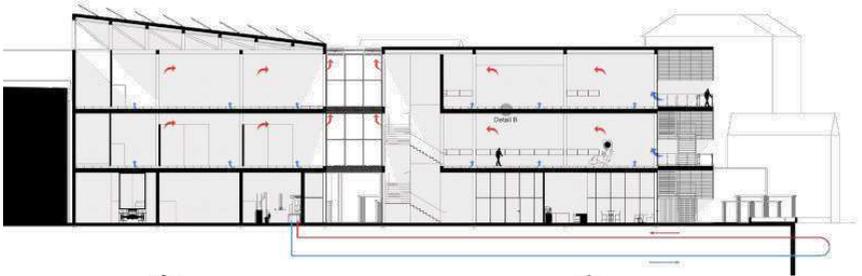
ALICE
MCCARTHY

Youthreach Urban Farm and Cookery School

This project includes a flexible market space and access route between Barrack Street and Dean Street. Complimenting this, a cookery school, café/meal centre, and urban farm expands on the existing Youthreach centre. This project aims to educate the Youthreach members and the surrounding community on food growth and preparation to help reduce Cork's food miles.

Fig 4.1.24 (top)
Alice McCarthy, Cookery School and Urban Farm, Persepctive
Fig 4.1.25 (bottom)
Alice McCarthy, Cookery School and Urban Farm,Contextual Plan

Fig 4.1.26 (opposite, top)
Alice McCarthy, Cookery School and Urban Farm, Technical Section
Fig 4.1.27 (opposite, bottom)
Alice McCarthy, Cookery School and Urban Farm, Persepctive

KELLY
O'GORMAN

St. Fin Barre's Community Light Garden

I wanted to ensure my intervention endeavoured to break the stigma surrounding people experiencing homelessness, and to provide cultural, social and food resources that the homeless community may not have access to already. The idea of this space is to provide a well-lit space that benefits the whole community, to diminish the sense of isolation experienced by many.

Fig 4.1.28 (top)
Kelly O'Gorman, Light Garden, Contextual Plan
Fig 4.1.29 (middle)
Kelly O'Gorman, Light Garden, Perspective
Fig 4.1.30 (bottom)
Kelly O'Gorman, Light Garden, Contextual Section

KATIE REILLY
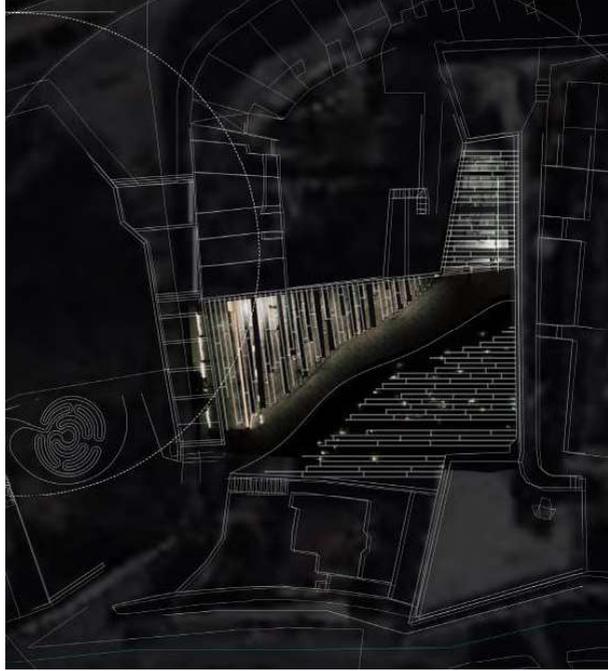
South Gate Quarter

The project is targeted at the opportunity that exists to rejuvenate city centre living within Cork. Core to the design is the creation of a human scale, intimate environment within a high density mixed use-scheme. In addition, it serves the wider city through the provision of community, cultural and public open space together with community services, retail and a food court.
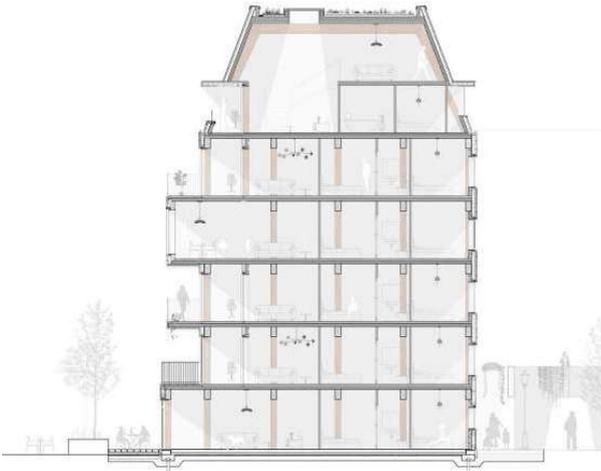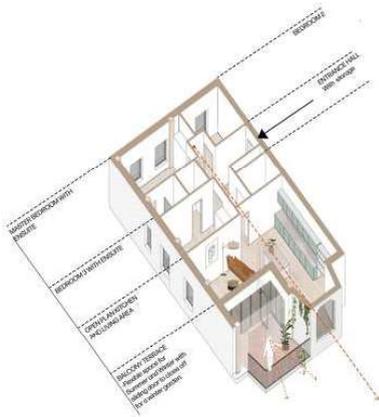
Fig 4.1.34
Katie Reilly, South Gate Quarter, Contextual Axo

KLAUDIA
STASIAK

Community Boatyard

The focus of this project is the regeneration of Crosses Green and the Meitheal Mara boatyard by transforming the current carpark to a biodiverse marsh and boardwalk. The project includes Meitheal Mara boatyard and a community building. A rooftop farm and a small café will provide the neighbouring community with freshly grown produce while improving the air quality and biodiversity of the area.

Fig 4.1.35 (top)
Klaudia Stasiak, Community Boatyard, Exploded Axo
Fig 4.1.36 (bottom)
Klaudia Stasiak, Community Boatyard, Contextual Axo

Cork Transport Hub

This project aims to supplement proposed infrastructure upgrades with several new transport modes covering the city and greater metropolitan area. The mixed use transport hub services these routes while also offering a number of services to promote use of these public transport amenities.

Fig 4.1.37 (top)
Sam Williamson, Transport Hub, Technical Section
Fig 4.1.38 (bottom)
Sam Williamson, Transport Hub, Structural Axo

CONDEMN AND CONFINE:
THE GOOD SHEPHERD ASYLUM AND FOUCAULDIAN SURVEILLANCE

ANGELA
AGRITO

Tutor
Kieran Cremin
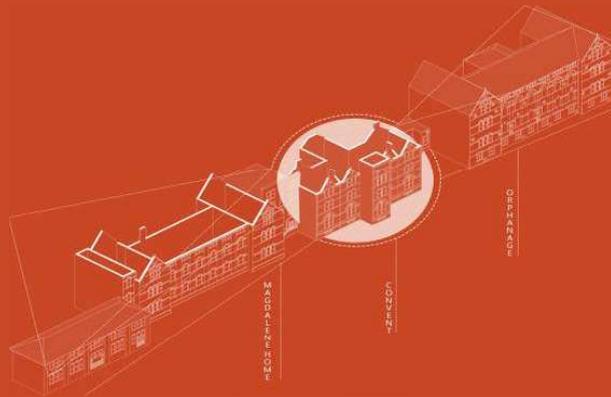
[1] Tschumi, 1981
[2] Foucault, 1975
[3] Smith, 2007
[4] Finnegan, 2001
[5] Richards, 2013

In his text 'Violence of Architecture', Bernard Tschumi interprets the definition of 'spatial torture' as a form of violence exercised through the physical environment of the user. In order for the victim to regress and lose their sense of self – their place within the plane of reason, the torturer forces the victim to abandon their own imaginary spatial markings and the area in which they are surrounded by forces them to recess into their discomfort and unease[1] Ireland's architecture of containment is a system embodied with undertones of programmatic violence and hegemony. The intrusion of institutionalised space onto contained bodies within the walls of the laundries replicate violence beyond the acceptable constraints of cultural-driven moral conformity. This type of spatial and mentally-induced violence is a factor often highlighted in architecture utilising incessant surveillance as a construct. Combining my thematic group and my own chartered interest in investigating how surveillance plays a role in institutionalised architecture, I chose the specific case of the Magadalene Laundries and Good Shepherd Convent in Cork as an investigation into discourse behind the adversity of surveillance design. The context both from an architectural and theoretical viewpoint of these infamous asylums will create an examination as to why surveillance, in Michel Foucault's philosophy, perpetrates 'power over mind' in a complex web that entraps space, subjectivity and social control[2].

After the independence of Ireland in 1922 and establishment of the Irish Free State, the Church and newly formed government worked together in ensuring that the position of Ireland's moral climate would be sustained independently from influence of neighbouring countries[3]. Having influential ties with the Catholic Church and the Catholic ideology, the creation of Ireland's Independent State and its nonsecular narrative was detrimental for women's autonomy in terms of motherhood and control over their femininity at the time. Particularly in the 20th Century, religious institutions focused on what was termed as 'rescue work' and a holistic approach to absolving sexually immoral women[4]. Although voluntarily aimed at the reformation of prostitution in Ireland during the 19th Century, Magdalene institutions by the 1900s would become much more punitive, duration of stays would be extended longer indefinitely, and the retrieval of women housed in these facilities expanded beyond prostitution. Following religious doctrine, women were patronised if they did not abide by a certain level of austerity, one that would jeopardise Ireland's inclination towards puritanism and moral conduct as a national image[4].

In the words of sociologist Professor David Lyon, surveillance is defined as "the focus, systematic and routine attention to personal details for purposes of influence, management, protection or direction."[5]

Drawing on his statement, the concept of surveillance and its application can be comprehended with relevance to these principles and the context of the Magdalene Laundries' agenda. The aspect of focus implies that surveillance is targeted at a particular subject. The intention is to collect information of the 'watched' through the eyes or gaze of the respective 'watcher'. The cause for procedure is deliberate and engaged for an objective rather than an act of contingency or without reason, therefore it is considered systematic. The idea of surveillance has transitioned to become more normalised in day-to-day life and as part of the institutional apparatus. Surveillance which for a time was commonly viewed as a feature of the autocratic, has morphed into a denser network of governing bodies and forces. Discourse in surveillance studies strongly suggest that, although rarely authoritarian, surveillance has been utilised throughout history as a subtler form of power and social control – a means of order within disorder, a mechanism of influence over human behaviour to achieve compliance and discipline when needed. The latter will be discussed in my research through analysing Foucault's 'gaze of power' and his work surrounding the genealogy of control in reformative apparatus. Its prominence within the study of surveillance itself and effectively being established into confinement systems, will aid in understanding the inner workings of surveillance in institutions such as the Magdalene Laundries. Through which, the theory of power and punishment as elaborated by Foucault, materialises in spatial and psychological realms.

As derived from the 'Panopticon', a penal institution designed by Jeremy Bentham in the 18th Century, 'panopticism' as referred to by Michel Foucault is a fundamental model in understanding the relationship between surveillance and control[2]. Evidently, this methodology can be applied to the Good Shepherd in Cork, whereby Foucault's panoptic principle has been translated into the building's fabric - including the authority that the Good Shepherd Sisters has presided over the institution in 19th and 20th Century Ireland. Discipline, punishment and control form a complex machine that intertwine the mechanics of the spatial, social and political environment. Ultimately as new frameworks for discipline developed over time, the 'watcher' has gone on to replace the antiquated role of the 'torturer'.

The presence of surveillance in the conception and visualisation of the Panopticon would go on to become pivotal in the study of power-based relations. The theory of panopticism has been a subject of discourse by both scholars and literary works alike throughout the years as a touch-stone for surveillance studies and further afield in disciplinary methodologies. An overview of Foucault's Panopticon theory and literary work of punishment and the asylum as a concept will be explored in this essay. This will then be dissected to address the impact that being monitored poses on the observer's ability to subdue the observed. This will form an investigation on surveillance's relationship with subjectivity, whereby the implication that being monitored can affect self-awareness and instigate fear simply by 'being seen' in the eyes of another. Subsequently, by examining the notion that surveillance does indeed have a profound impact on one's own morality due to this heightened clarity for reform and societal judgement, reflections influenced by these findings will be made in conjunction with the Good Shepherd's integration of surveillance procedures relevant at the time of its operation between surveillance and control[2].
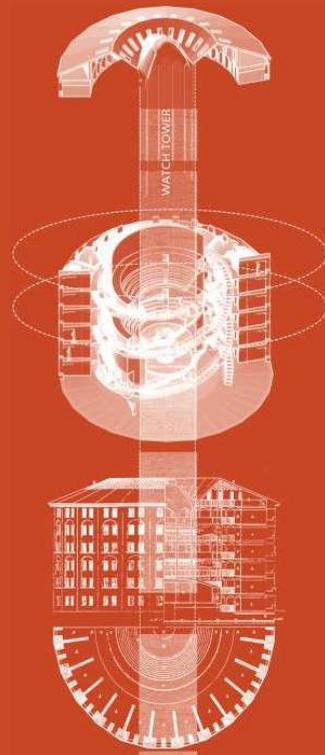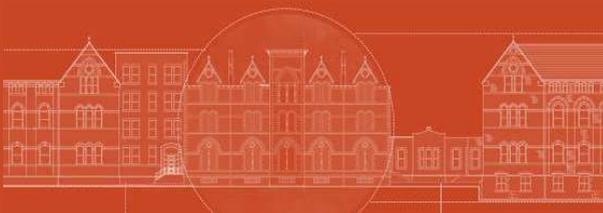
MACHINE LEARNING

Unit Leaders
Nicci Brock
Ruairi Finucane

Year Co-ordinator
John McLaughlin

Students
John Clapham
Louise Counihan
Ciara Donnelly
Daire Fenton
Leah Gleeson
Bobby Hackett
Aidan Kelleher
Eoin Mangan
Shane McCullagh
Conor McGeever
Eadaoin Metcalfe
Liam Mooney
Donnacha Roche
Anisha Yuhhi

A group examining and developing a proposal for a new school of engineering in UCC, and through which, exploring the impact and relationship between the growing campus of UCC and the City of Cork; functionally, physically, fiscally.

Working from an existing brief, developed by the school of engineering, UCC, we proposed to design an engineering facility for UCC which will promote and teach engineering, combining the currently disparate faculties in one environment. In creating an open, collaborative and enriching learning environment, to foster collaboration and collegiate relationships, we sought to explore the technical / social / philosophical environments of educational campuses and buildings, and their relationship with the city. As the University expands simultaneously within the bounds of the campus, and through disparate satellite campuses across the city, the students examined the role of UCC in the development of Cork city and the symbiotic relationship between both.

We asked:

What, where and how is the relationship between the Campus and City influencing and impacting on the form and type of development of educational buildings? What happens when the university expands beyond its campus enclosure, and inhabits disparate areas in the city, creating satellite faculties and campuses?

What are the wider societal / political attributes of campus development and its educational buildings? What specifics and nuances are there / should there be in a building for a specific (or broad) range of educational requirements?

What are the physical attributes and requirements for an education building: what are the appropriate physical spaces for a required physical programme?

Can we explore the potential of the building to be used as a teaching tool, as Alvar Aalto made his own experimental house to test his own teaching / research?

Is a building for education just like any building for any process? Is it like just like an industrial/ process manufacturing plant? Raw material (students) in one end.... Products (graduates) out the other.....is it like a car factory.

We wanted to explore the concept within society now, and in the future, asking how will buildings of STEM foster and promote learning into the future? Asking what is the architectural / philosophical relevance in designing such spaces? We wanted to try to make beautiful, useful and environmentally responsible proposals that address the complex requirements of an ever evolving discipline. The project design solutions sought to support reduced carbon impacts in terms of the building operation, its life cycle and also embodied carbon.
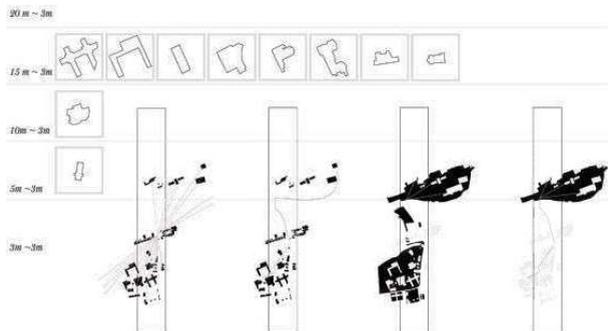
Fig 4.2.00
Anisha Yuhhi, UCC, Structural Altitude Analysis and Campus Massing
Fig 4.2.01 (opposite)
Anisha Yuhhi, Intervention, Sketch Development

Grade 4

Grade 3

Grade 2

Grade 1

CIARA
DONNELLY
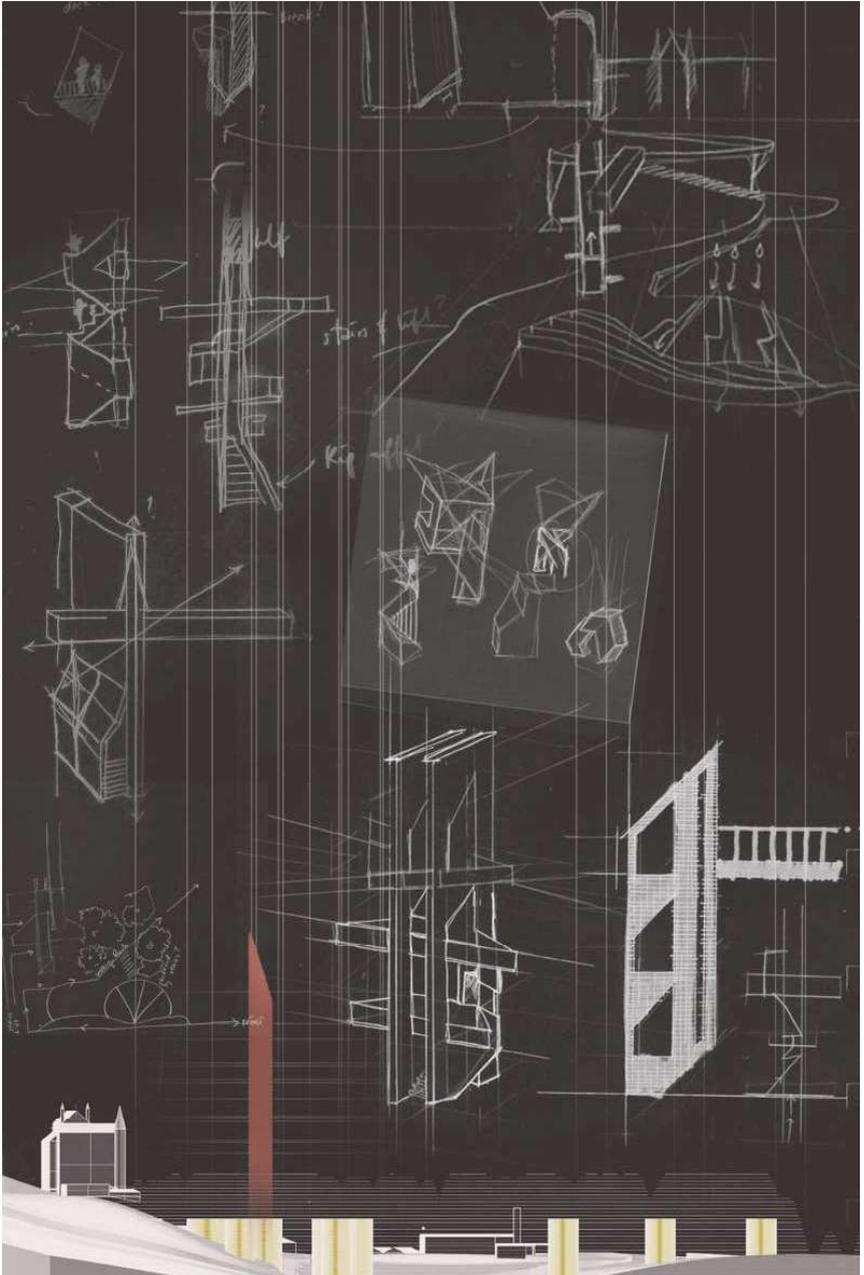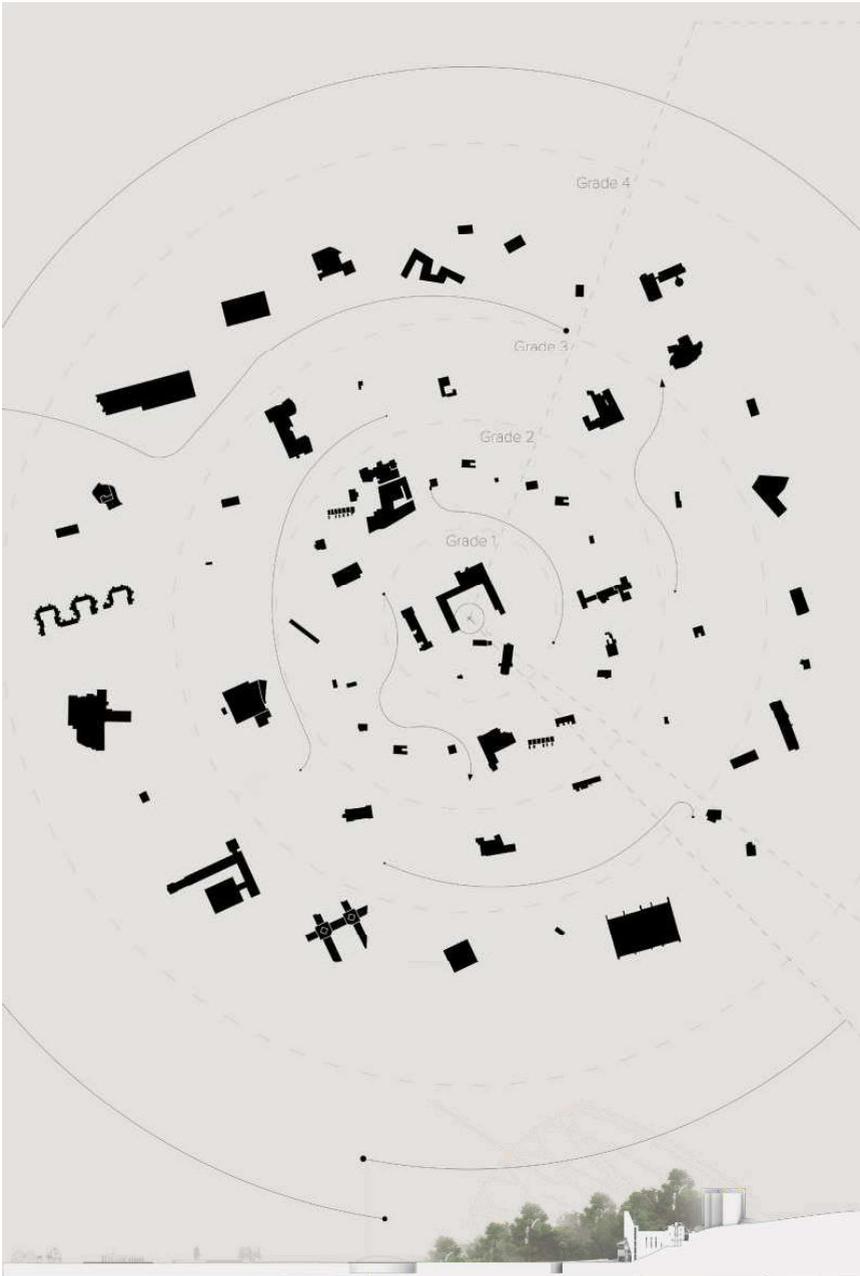
After researching UCC's development over time with particulat emphasis on satellite campuses across the city and how these buildings came to be designed, I concluded that the original pathways and walkways must change in order to make room for future developments, like chess pieces. I then built my design thesis on this concept of people's movements and how buildings aid in path creation.

For my intervention, I wanted to bring a new energy of movement to UCC's North Campus, thus designing a shared student accommodation and market space to further open this site and encourage the flow of students.

Then for my engineering school, I based my design on how students would move through the space, designing a landscape that engages with 2 linear parallel blocks which create movement between them, while also redesigning the River Lee Walkway. For the school's interior, I designed floor plans that allow for quiet teaching spaces and laboratories that are north-facing, while containing open staircases and breakout spaces to the south, to create a social and interactive focus to the building. Based off of my research, I designed a school that influences the movement of students, opposed to acting as an obstacle to movement, while creating lively atmospheres and fluid transitions between the internal and external spaces.
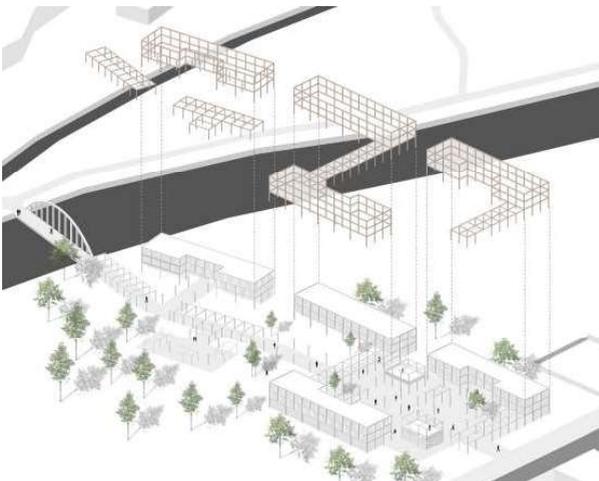
Fig 4.2.0 and 4.2.03 (opposite)
Daire Fenton, UCC, Hierarchical Structural Analysis and Anisha Yuhhi, UCC, Contextual Section

Fig 4.2.04 - 4.2.06 (top)
Ciara Donnelly, Engineering School, Perspectives and Contextual Axo
Fig 4.2.07 (bottom)
Ciara Donnelly, Engineering

DAIRE FENTON

My thesis locates itself on the North Mall Campus, already part of UCC, in and around the currently derelict Frank Murphy bottling plant that has been abandoned since 2007. Through my research and design, the aim was to create considered, resourceful space for the faculty on the North Campus site. The scheme uses the concept of expansion using modular LVL systems in conjunction with the use of assistant technologies that are becoming more relevant in the working world, to create an evolving Engineering school for UCC. The structure of the school allows Engineering students to interact with the building environment like no other college world wide, creating a next generation way of teaching through doing. Varying methods of timber construction became key to my design and I developed a large catalogue of elements that could be made from sheets of wood and laminated to create beams, columns, trusses, connectors etc., which could be interchanged and manipulated to create different typologies depending on the faculty or space needed within.

Simplistic rectilinear external forms reference the existing industrious bottling plant are juxtaposed to the interior spaces that create moments for users to explore and understand. The exposed simplicity of the buildings' naked fabric reflects on the faculty's goal of being an Engineering school; sparking interest, fuelling ideas, and promoting learning and structural understanding for its end-users: Engineering students.

Fig 4.2.08 - 4.2.12
Daire Fenton, Engineering School, Assorted Drawings: Axos and Perspectives and Plan
Fig 4.2.13 (bottom)
Daire Fenton, Engineering
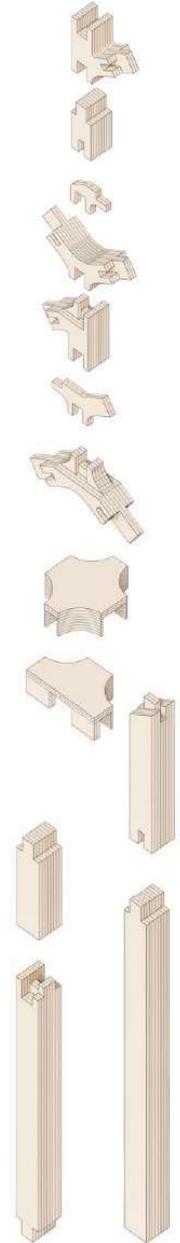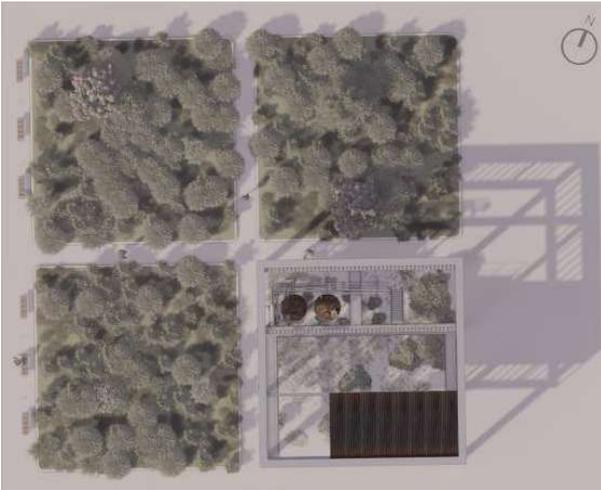
BOBBY
HACKETT

The thesis project began by researching the growth of the university, physically and socially. It was observed that as a modern university grows, it tends to expand outward into new spaces. This outward expansion moves the university into new spaces, creating new buildings and adopting more students. What might seem to be a positive move for the university and city, in reality, it is extremely damaging.

It was observed that the outward expansion lends a university to favour the construction of new buildings over the re-purposing of existing university buildings. Subsequently this leads to primary campus buildings being left in a state of disrepair and ultimately dereliction. This can be observed in Cork where 12 main campus buildings are classified as being "in serious need of repair" while 7 of the 8 construction proposals are for new buildings off-site.

Furthermore, it was observed that as the university creates more satellite campuses, there is a rise in high fee-paying global students and a decline in disadvantaged local students, to offset costs of expansion, creating a "Pandora's Box" paradox.

Following the Social Change Model developed by the Higher Education Institute at UCLA in 1990 as the instigator for my design proposal, my thesis questions how it can be applied spatially in a student-led university building and program. The Kane building at UCC became my site for my design proposal.

Fig 4.2.14
Bobby Hackett, Engineering School, Elevation Detail
Fig 4.2.15 - 4.2.18 (opposite)
Bobby Hackett, Engineering School, Assorted Contextual Sections and Axos

78
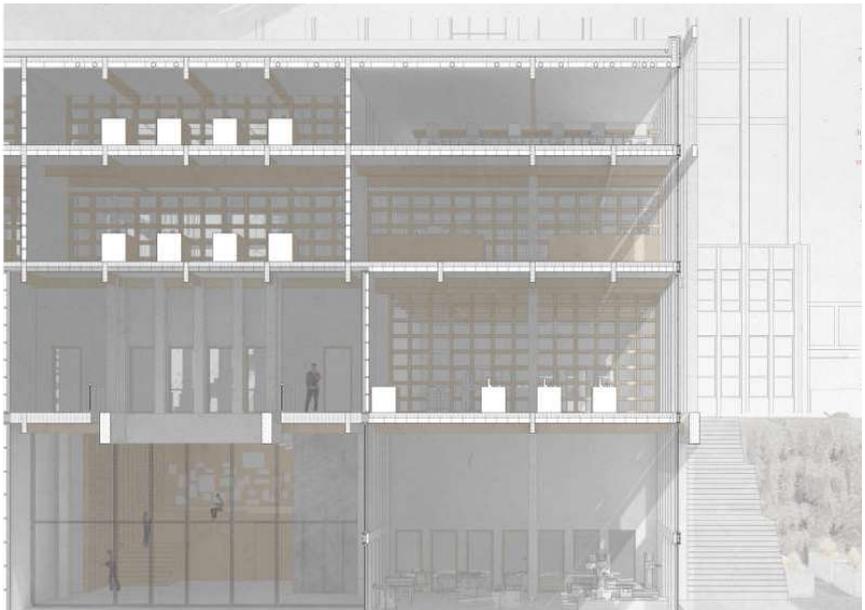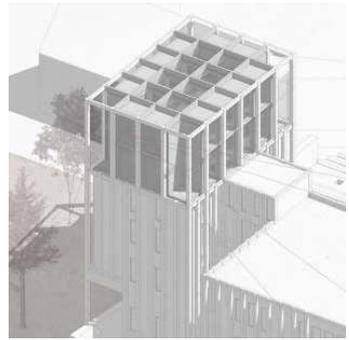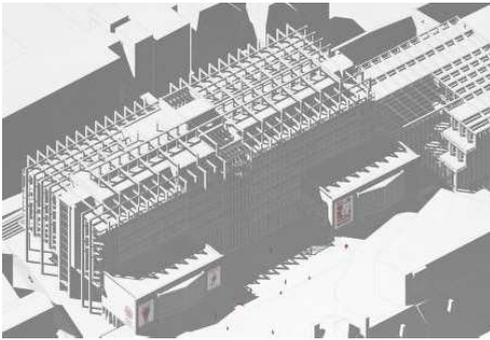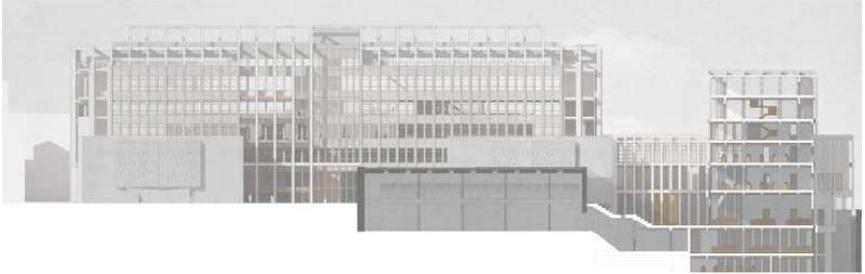
AIDAN
KELLEHER

One of the main themes for the design thesis of my UCC engineering school was adaptive reuse.

In my semester 1 mapping research I looked at how UCC used adaptive reuse in order to transform old sites in Cork City into UCC satellite campuses. Building on this concept, I looked at the South Docklands in it derelict, run-down condition and saw an opportunity to implement student life into this area with a UCC satellite campus.

I chose the old Odlums factory building to refurbish into my campus. The existing structure and open surrounds would allow for further expansion of the campus on the east side in the future.

L=shaped glulam formed the structural of the development. The link between the existing and new became a courtyard space. The existing became home to a double height auditorium space. Design of research, study and laboratory spaces, canteen, cafe, library, and workshops fit into the site.

Access to the building is linked to the new bus and bike transport links on Kennedy Quay and I designed a green space that drops down to the river edge for public interaction with the river and as a boat docking point.
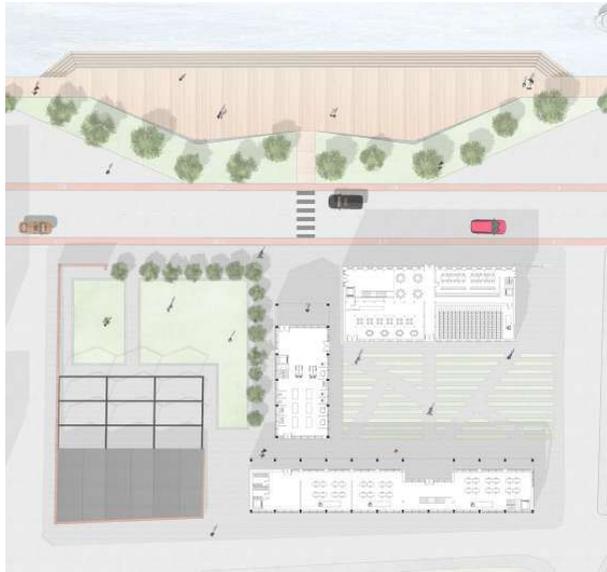
Fig 4.2.19 (top)
Aidan Kelleher, Engineering School, Contextual Plan
Fig 4.2.20 (middle)
Aidan Kelleher, Engineering School, Sectional Perspective
Fig 4.2.21 (bottom)
Aidan Kelleher, Engineering School, Perspective

ANISHA YUHHI

From the historical research, the patterns of events conclude a horizontal formation of growth. This design proposes the approach of vertical path with an integrable function that enables future expansion on multi level planes of the terrain in anticipation of the ever-changing patterns of events and preservation of site sensitivity.

This thesis investigates how architecture can evolve its presence on a sensitive landscape to reconnect circulation through humanising architecture and environmental considerations. Post-industrial buildings lack their engagement with nature, the authenticity of material and tectonic logic in their construction. Due to the nature of the site, this project allows multi-level manipulation of space, material, and structure through a vertical enabler. Integration of natural landscape features enables environmental design strategies that can shed light on future development.

The project is heavily based on circulation that transcends to the articulation of the terrain, therefore, unlocking the potential symbiotic relationship of architecture and nature, thus enriching the humanisation of commercial architecture.

Fig 4.2.22 (top)
Anisha Yuhhi, Engineering School, Sectional Perspective
Fig 4.2.23 (middle)
Anisha Yuhhi, Engineering School, Perspective
Fig 4.2.24 (bottom)
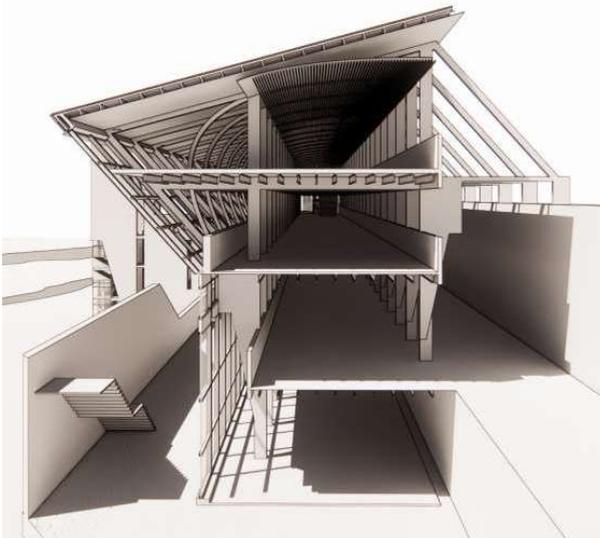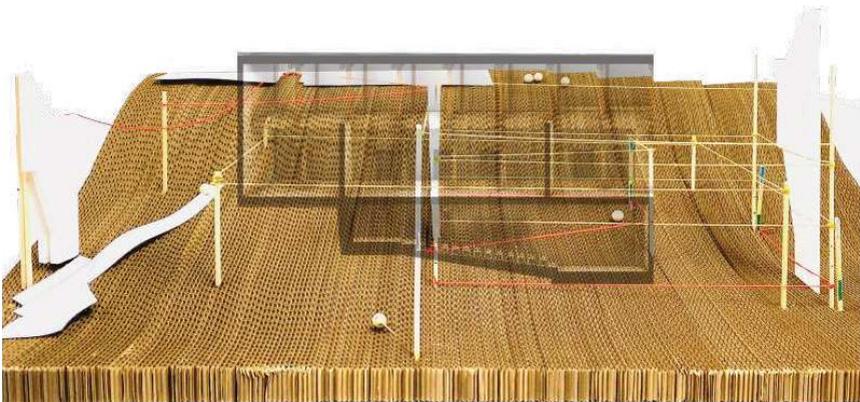Anisha Yuhhi, Engineering School, Sectional Perspective

Fig 4.2.25 (top)
Anisha Yuhhi, Engineering
School, Perspective
Fig 4.2.26 (middle)
Anisha Yuhhi, Engineering
School, Sectional Perspective
Fig 4.2.27 (bottom)
Anisha Yuhhi, Engineering
School, Sketch Model Study

Fig 4.2.28 (opposite)
Anisha Yuhhi, UCC
Intervention, Contextual Axo

HETEROTOPIC HERITAGE
OTHER SPACES OF CORK

KLAUDIA STASIAK

Tutor
Sarah Mulrooney

Utopia is 'an imaginary place or state in which everything is perfect.'[1] If utopias are spaces that are not real, spaces that showcase not what is but the imaginary spaces of what could be or should be, therefore heterotopias are somewhat opposite or different from utopias. As described by Michael Foucault, heterotopias are spaces that exist in our daily lives, spaces that are somehow other, intense, conflicting, and transforming. By the means of the study of Michel Foucault's 'Of Other Spaces: Utopias and Heterotopias', I discuss what I consider to be the meaning of each principle and how it applies to Cork City nowadays. Through this exploration, a series of different sites across Cork City are discovered, which I regard, through my research, as heterotopias. I explore their history, functions, and impact on Cork.

Initially, I studied the Gaol Prison in Cork as an example of a 'heterotopia of deviation.' Whether it be through spatial arrangement or physical labour, deviation was managed in these spaces in the past. '…what we might call heterotopias of deviation: those in which individuals whose behavior is deviant in relation to the required mean or norm are placed.'[2]

Following on from my study of the Gaol, I have used primary research to examine *TEST SITE,* a site adjacent to the Bridewell Garda Station in Cork City which could be regarded as a heterotopia. Dissertation research was made through interviews, archives, and photographs to determine whether a regenerative placemaking approach could be a solution to derelict heterotopic sites across the city. *TEST SITE* is a multidisciplinary response to a vacant industrial site in Kyrl's Quay where heritage exists in harmony with biodiversity and ecology. Through regenerative placemaking, a decaying island site in the city centre transformed into a conversation between the contrasting growth and dilapidation in Cork City. Interestingly, architects and artists are drawn to places like these.

The six principles of heterotopias by Foucault will be used to clarify why I think this site is an example of a heterotopia throughout the layers of time. Studying a site through this approach highlights its significance and rich heritage.

[1] Oxford, n.d.
[2] Foucault, 1967

Klaudia Stasiak, Map of North Main Street and TEST SITE based on Cork City Council Plan, John Rocque's Survey of Cork City and Sururbs 1773 (Source: Cork City Libraries)
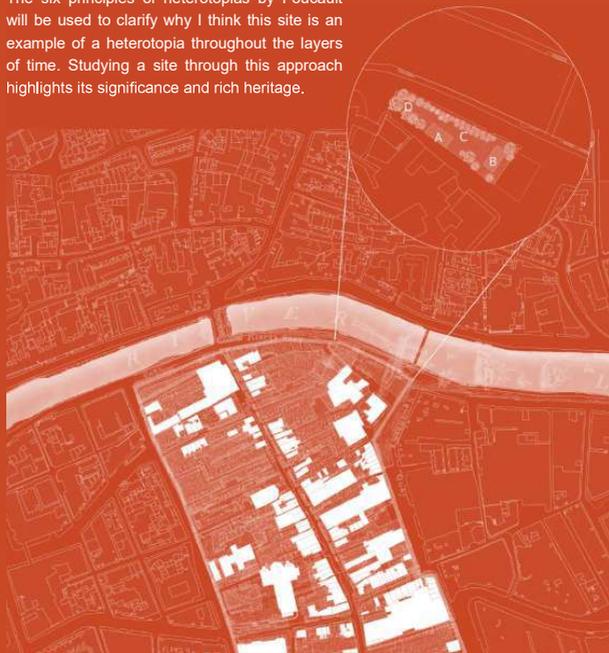
PRINCIPLE ONE: Heterotopias of 'Crisis' and 'Deviation'

[3] AAI, n.d.
[4] Hurley, 2005
[5] McCabe, 2014
[6] NIAH, n.d.
[7] Rice, 1994

A place cannot be entirely comprehended without examining its history. There are a few examples of principle one of heterotopias, the 'heterotopias of crisis and deviation'. These examples can be seen, beginning with medieval times. 'The Normans led by Robert FitzStephen and Milo de Cogan captured Cork in 1177 and expelled the Ostmen from the city.'[3] The five-metre-tall stone walls were built beginning in the southern part of the city in the early 13th century and completed on the north side by the early 14th century. As seen in the plan of Cork City from 1545 in figure 6, the medieval walls facing northeast ran through what is now Kyrl's Quay. The two islands, north and south, were divided by a narrow river channel. It seems like Cork was just one main street spanning from the North Gate to the South Gate. The significance of the town wall is quite striking throughout the years. The true extent of the old-walled city is shown in comparison to the outline of streets in Guy's 1893 map of Cork City.

'These not only provided defence but also defined the urban borough and its privileges and gave expression to the power and prestige of the inhabitants'[4] This medieval wall had a major influence on how the city was formed and still holds this importance today. From the very beginning of the old-walled city, Cork managed deviation through the use of these walls. Medieval walls enabled protection and exclusion of 'others' attacking the city.

Foucault argues that 'a site is a place that is defined in terms of relations with other sites.'[5] *TEST SITE* is directly related to the sites surrounding it. The building functions that surround the site have a great impact on how a person experiences the site, even before entering it. The experiences and sights encountered, as one approaches, can affect the initial appearance of a place. This may be positive or negative.

Nowadays, a certain building function that could be considered a 'heterotopia of crisis' by Michel Foucault is found near the western boundary of *TEST SITE*. The Cuanlee Refuge for Abused Women and children is situated there. This establishment provides secure crisis accommodation for women and children. This foundation supports people in need by providing many other services like the 24-hour helpline, therapeutic services, and workshops. Specific art therapy workshops create a safe and engaging environment for children. This refuge has a great impact on the local community by supporting women and children in crisis. Perhaps the positioning of *TEST SITE* nearby positively influences the users of this building, not only in the activities that happen on *TEST SITE* but also by providing an outdoor biodiverse garden for the community to reflect and contemplate. The various workshops and events held on-site so close to this refuge could potentially make women and children feel safe and comfortable in the area. The revitalisation of the site makes a positive difference in how the street is perceived in terms of security and wellbeing.

Another building that is a heterotopia of both 'crisis' and 'deviation', is the Garda Station on the southern boundary of the site, just opposite Kyrl's Street. This seven-bay, two-storey building, was built in 1932. This historically significant building is an 'interesting mid-twentieth century addition to this predominantly nineteenth-century street.'[6] Garda Leslie Rice writes about the interesting history of this site in the 'Police Friendship' magazine: 'The building itself is a relatively modern one but the site it occupies has been associated with a 'Bridewell' since 1731.'[7] 'Bridewells' were given this name as a short form of St Bride's Well in London, which was a house of correction or detention. This hostel was a place for 'ladies of the night' and homeless children, providing them with accommodation for the night. The building use changed over time and the establishment became a 'house of detention.' The name 'Bridewell' grew to be used repeatedly as it spread throughout the UK and Ireland. The St Bride Well influenced the other places of correction to be named 'Bridewell' for short, in Ireland and the UK. Therefore, this name was also given to this building and is called a Bridewell to this day.

OF MEMORY

Unit Leaders
Joseph Mackey

Year Co-ordinator
John McLaughlin

Students
Michael Carroll
Leah Cunningham
Ragd Elsiddig
Jack Hannon
Daire Horgan
Matthew Hurley
Martha Lyons
Caimin Muldoon
Ellen O'Gorman
Dollar Salami
Peter Spillane

of memory – mnēmonikos

The belief that works of Architecture can prolong or embody memory of people or events has been a feature of architecture since antiquity.

Rossi argued that memory could be used to read and understand urban fabric and that an Architect who built in a city would not only change the physical form but also alter the collective memory of its inhabitants. T.S Elliot proclaimed that any work of art, alters the memory of all previous and proceeding works. Gottfried Semper argued that materials and architectural form could remember previous applications and typologies and Freud suggested that memory on its own is not interesting, what matters is the tension between memory and forgetting.

This year our unit researched the idea of memory in Architecture on Spike Island in Cork Harbour. We investigated how the concept of memory can influence design thinking and practice and how memory can be used as a strategy for analysing selected sites. The students proposed architectural interventions sought to amplify, manipulate, or negate these existing mnemonic conditions.

We looked at how Architecture can communicate historic memories and parables and act as an expression of communal meaning and memory. We investigated how memory can be used as a design technique, creating a dialog with the site that critiques and acknowledges past occurrences and previous states in order to draw and discover a programme of present requirements.

In Semester 1 students were asked to explore Spike Island and create a spatial investigation and mapping of its mnemonic conditions. Semester 2 thesis proposals emerged from our research and interests developed during Semester 1 and explored how memory can be made manifest in the inscribed and incorporated practices of form, function and tectonics.
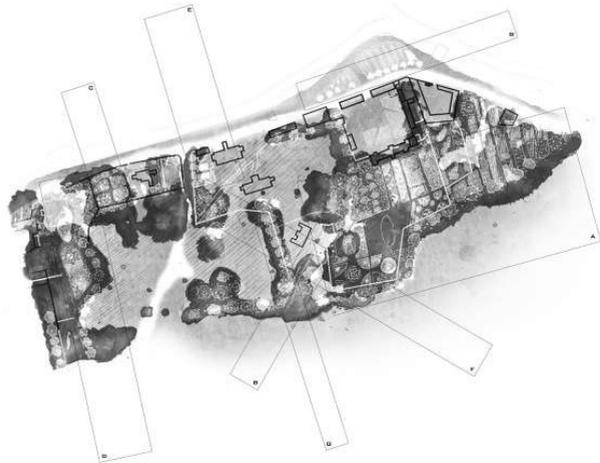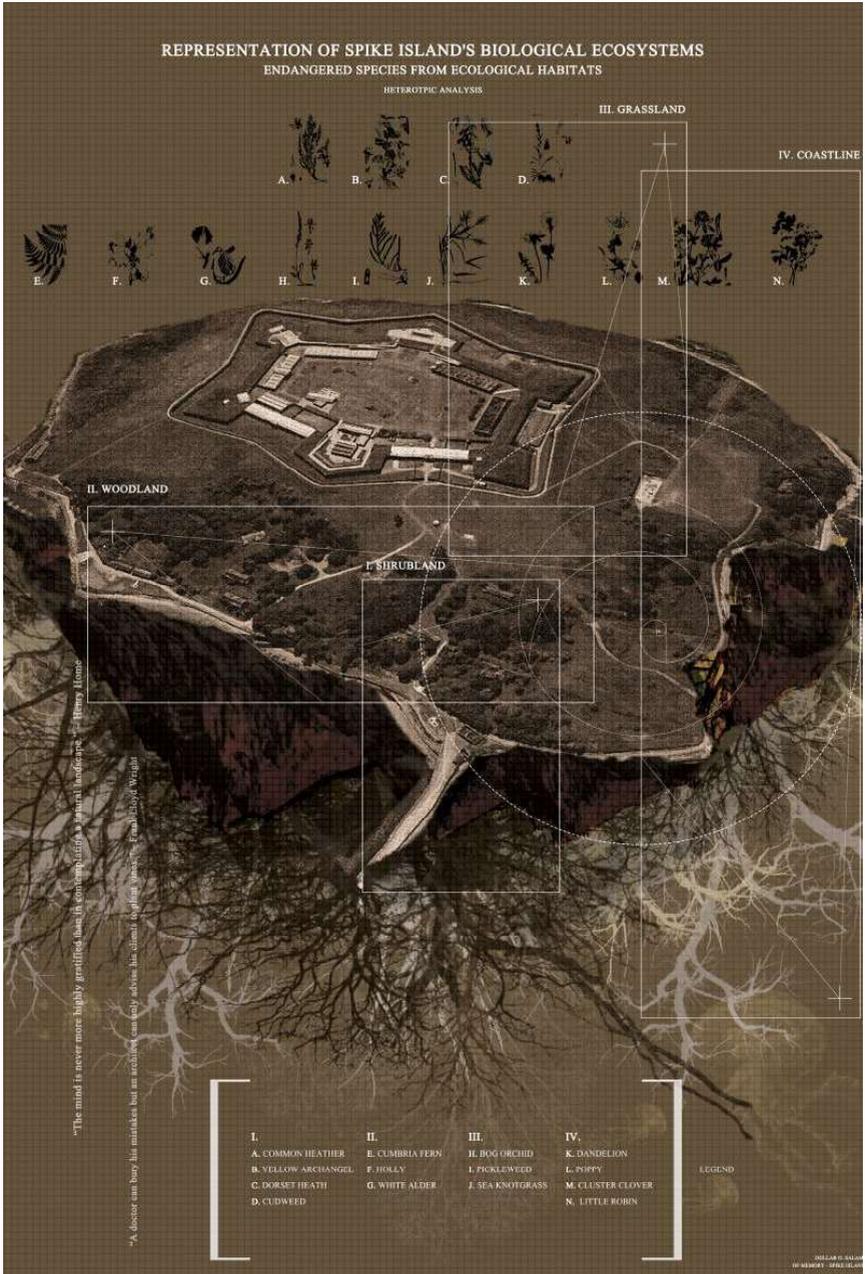

Fig 4.3.00 and 4.3.01
Martha Lyons, Spike Island,
Contextual Map and Section of
Garden Growth
Fig 4.3.02 (opposite)
Dollar Salami, Spike Island
Biological Ecosystems Map

This project examines ways to preserve ruinous structures, utilise their aesthetic, and design an interactive intervention that weaves the old and new together in a seamless way. A series of ruins on the northside of Spike Island will serve as a base for a new retreat centre on the island. The existing roofing material is removed so that the rmain structure becomes the ba

Adopting the vernacular Irish farmhouse typology of the existing with simple volumes and courtyard-based organisation evolves a new expressive tectonic language. Culture through traditional construction methods helps achieve more immediate and compelling emotive qualities to the design.

Varying methods are used to incorporate these old structures into new design, three of which are explored. The first is protection of the structure to prevent further damage, to preserve. Second is the treatment of existing structures as a foundation for new development, to ulitise. Third is to take spaces left behind from the old structure and reimagine that they could be to complete the image to interact.

Fig 4.3.03 (opposite)
Martha Lyons, Contextual Section and Plan of Spike Island

Fig 4.3.04 and 4.3.05 (top)
Michael Carroll, Contextual Sections
Fig 4.3.06 (middle)
Michael Carroll, Elevation
Fig 4.3.07 (bottom)
Michael Carroll, Contextual

LEAH
CUNNINGHAM
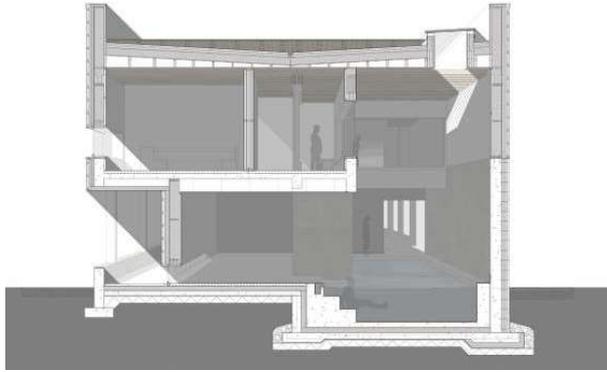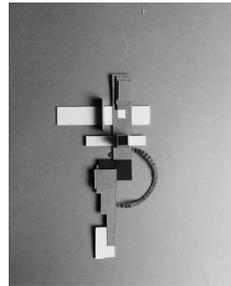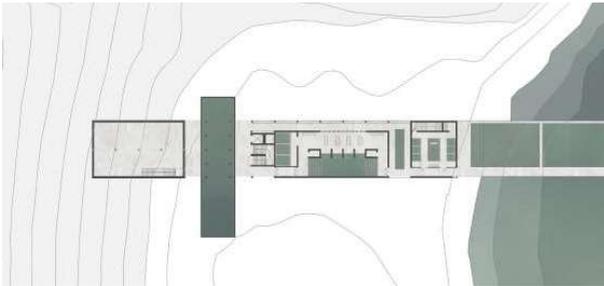
My final year thesis project focuses on Foucault's Heterotopia Principle 6, which looks at spaces of illusion and compensation and how every space occupies a function after its time and then Halbwach's concept of 'Collective Memory', where memory helps memory and so everyone experiences spaces differently. I honed my focus on the sense of touch in relation to the layout and materiality.

To bring the sense of community back to Spike Island and built on existing memory, I designed a scheme with community participation that enhances a new sense of life. My design is for a live-work housing scheme built by its residents. A base design for the units allows for personal additions through their own construction. Timber is the construction material of choice for its lightweightness and easy construction.

By allowing residents to build their homes together, the workshop situated in the corner of the scheme, provides them with space where there are comfortable to build upon the community. This also instils the desire to keep on building these memories together, with everyone holding onto their own experiences that embeds itself onto surrounding spaces as per Halbwach.
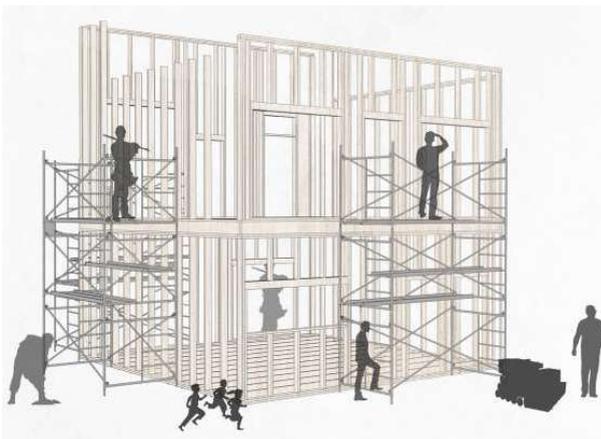
The sense of community has been lost on Spike Island with the illusion of life lost meanwhile the memories are still engraved into its soil. All that it requires is a start to revive the life that was once there,

Fig 4.3.14 (top)
Ragd Elsiddig, Technical and Environmental Sectional Perspective
Fig 4.3.15 (middle)
Ragd Elsiddig, Section
Fig 4.3.16 (opposite, bottom)
Ragd Elsiddig, Construction Process Perspective

91

JACK
HANNON

After reinspecting the research I completed in semester one, I decided to once again circle my focus around the relationship between the celestial bodies and the past and future of Spike Island. With this in focus, I set out to create a satellite campus for University College Cork as a dedicated centre of the study of archaeo-astronomy. Having a building dedicated to the study of both astronomy and archaeology meant that the past and future of the Island could be investigated, linking to the theme Of Memory. This campus would provide archaeological and astronomical facilities for students, scholars and professionals, such as labs, equipment storage, telescope rooms, a library and a lecture hall with expansive views to the sky.

Using the hidden histories and ornamentation of the night sky provided me with my initial layout and sketch design proposals. I undertook a second series of studies into the celestial activity of the night sky. I calculated the solstice and equinox sun angles for the year specifically to the coordinates of my site on the island. I also paid particular attention to the moon by studying the various moon phases and transitions throughout the year. I felt that this was an important aspect of studying the celestial forms due to the impact the moon has on the tides and, consequently, on the island.
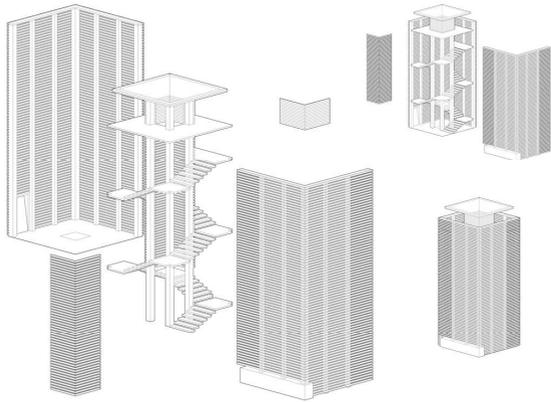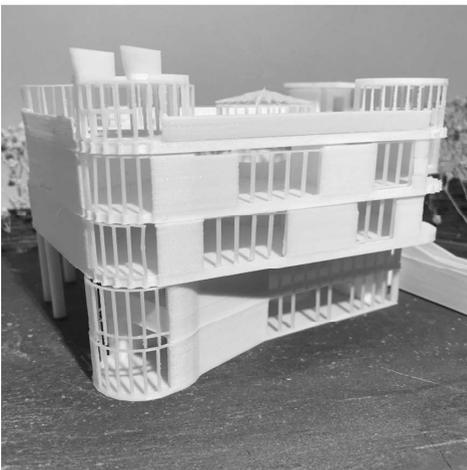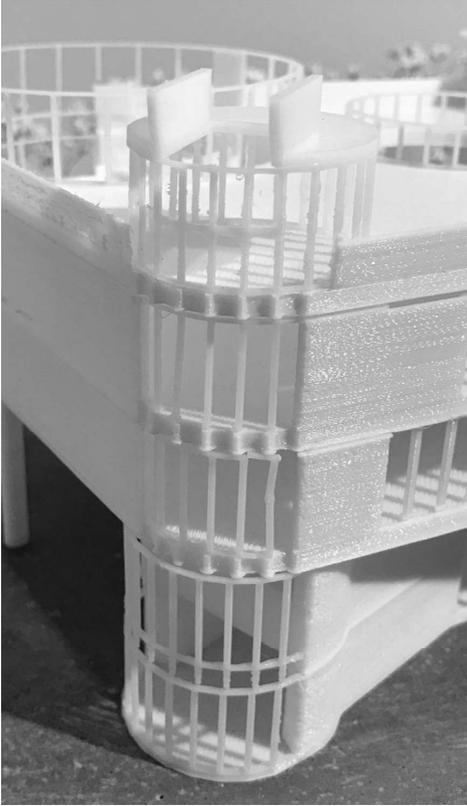

Fig 4.3.17 (top)
Jack Hannon, Circulation Axo
Fig 4.3.18 (middle)
Jack Hannon, Contextual Perspective
Fig 4.3.19 (bottom)
Jack Hannon, Sectional Perspective

Fig 4.3.20 - 4.3.25 (opposite)
Jack Hannon, Model Photographs

DAIRE HORGAN

The basis for my design thesis is rooted in an analysis of Foucault's; "Of Other Spaces: Utopias and Heterotopias", particularly his description of the Principle 4 of Heterotopias, wherein he states that; "Heterotopias are most often linked to slices in time" and began my investigation, through analysing historical maps, which led me to pose the idea that, when viewed through the lens of memory and the passage of time, different sites clearly do become superimposed on one another. Ideas of superimposition and palimpsest shaped my design thesis throughout research and design stages, particularly, as they related to Spike Island and the built fabric of the fort and island as a whole. These were ideas which Alois Reigel investigated in his 1910 text: The Modern Cult of the Monument. In the case of Spike Island, I argue that the delineation between architecture and monument becomes opaque due to the layers of time and "age value and historic value" which are present.

The building which became of primary interest to me as it exhibited the most visible and tectonic signs of not just the passage of time, but also of specific events which relate to the building, was the Officers' Quarters, or Block B. In this limestone and brick constructed housing, turned inmate holding block which sits in ruination, I propose to house an archive, exhibition and library spaces for artefacts pertaining to Spike Island.

Through the sensitive restoration of the existing building and addition of a stone exoskeletal extension to the original block, this public building will continue the history superimposition on this site.

Fig 4.3.26 (top)
Daire Horgan, Sectional Perspective
Fig 4.3.27 (middle)
Daire Horgan, Contextual Axo
Fig 4.3.28 and 4.3.29 (bottom)
Daire Horgan, Elevation Detail and Technical Section Studies
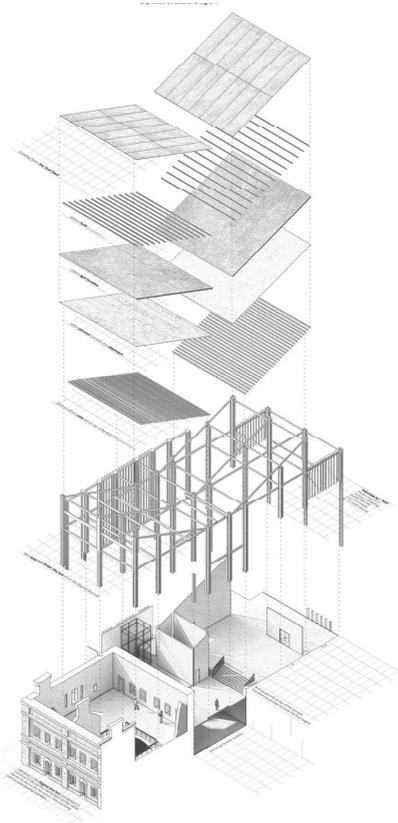
I noted a disconnect in Spike Island between the people who inhabit the space and the space they inhabit. This is representative of the second principle of heterotopias. The island as a whole lacked an emotional resonance. The ruinated structures of the island and the documents of past inhabitants however provided this resonance.

After reading The Modern Cult of the Monument (1) and the Ruin (2), I noted that this resonance came from two factors in particular: Age Value and Historic Value. While these values are represented in Spike Island the spaces that represent them are not usable. I decided that the proposed intervention should address this shortcoming.

The proposed design intends to make a usable monument out of the currently derelict "1915 Block" and Block A (Soldier Block). The intervention consists of both covered, insulated spaces and spaces open to the environment and in turn to further patination.

The insulated spaces will function as a new gallery space for the art created by past prisoners, which is currently displayed in the "Punishment Block" as well as Art by a Resident Artist from the Sirius Arts Centre (Cobh) and members of the public attending the Island for an Art Therapy Retreat.

Fig 4.3.30 and 4.3.31 (top)
Matthew Hurley, Art Gallery and Studio, Exploded Axo and Assorted Perspectives
Fig 4.3.32 (bottom)
Matthew Hurley, Art Gallery and Studio, Contextual Section

CAIMIN
MULDOON

The project brief is that of an annex for the Marine Institute of Ireland, who have partnerships with Irish universities NUIG and UCC. These partnerships enable the Marine institute to station several observation and 'listening posts' along the coast in order to monitor ecological and environmental conditions. Stations such as that at Carna in Galway also conduct research as well as monitor the coast. In this regard, the brief proposes that the marine institute could utilise a permanently manned monitoring and research station based on Spike Island. This annex would have to provide living capabilities for a team of researchers which would be stationed there for a period of weeks at a time, living self-sufficiently. The annex is proposed to be arranged as an analogy for the previous monastic settlement rumoured to have been based on the island. The Liber Ordine Creaturarum, written on the island, suggests that monks of early monastic settlements were not only devoted to their faith, but also the reconciliation of science and the known universe with the orthodox. The researchers are expected to live a frugal and dedicated existence, devoting their time to their work rather than a theological pursuit.
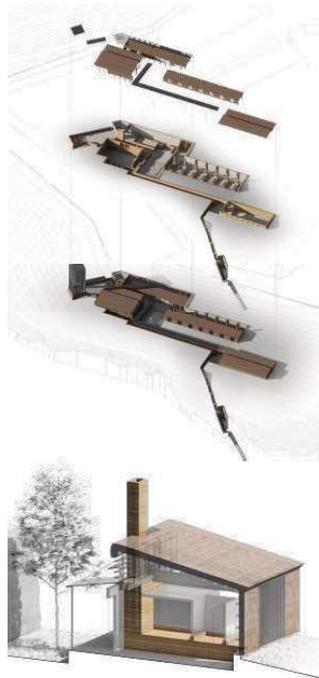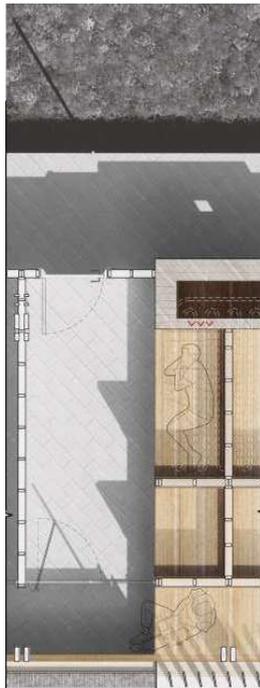

Fig 4.3.33 (top)
Caimin Muldoon, Marine Institute, Techincal Section
Fig 4.3.34 - 4.3.36 (middle)
Caimin Muldoon, Marine Institute, Dorm Plan Study and Bell Section and Axo
Fig 4.3.37 (bottom)
Caimin Muldoon, Marine Institute, Study Model
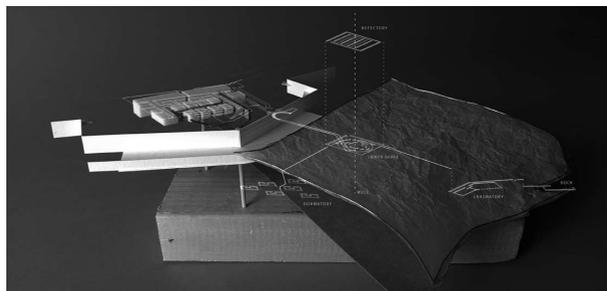
Fig 4.3.38 (opposite)
Caimin Muldoon, Marine Institute, Contextual Model
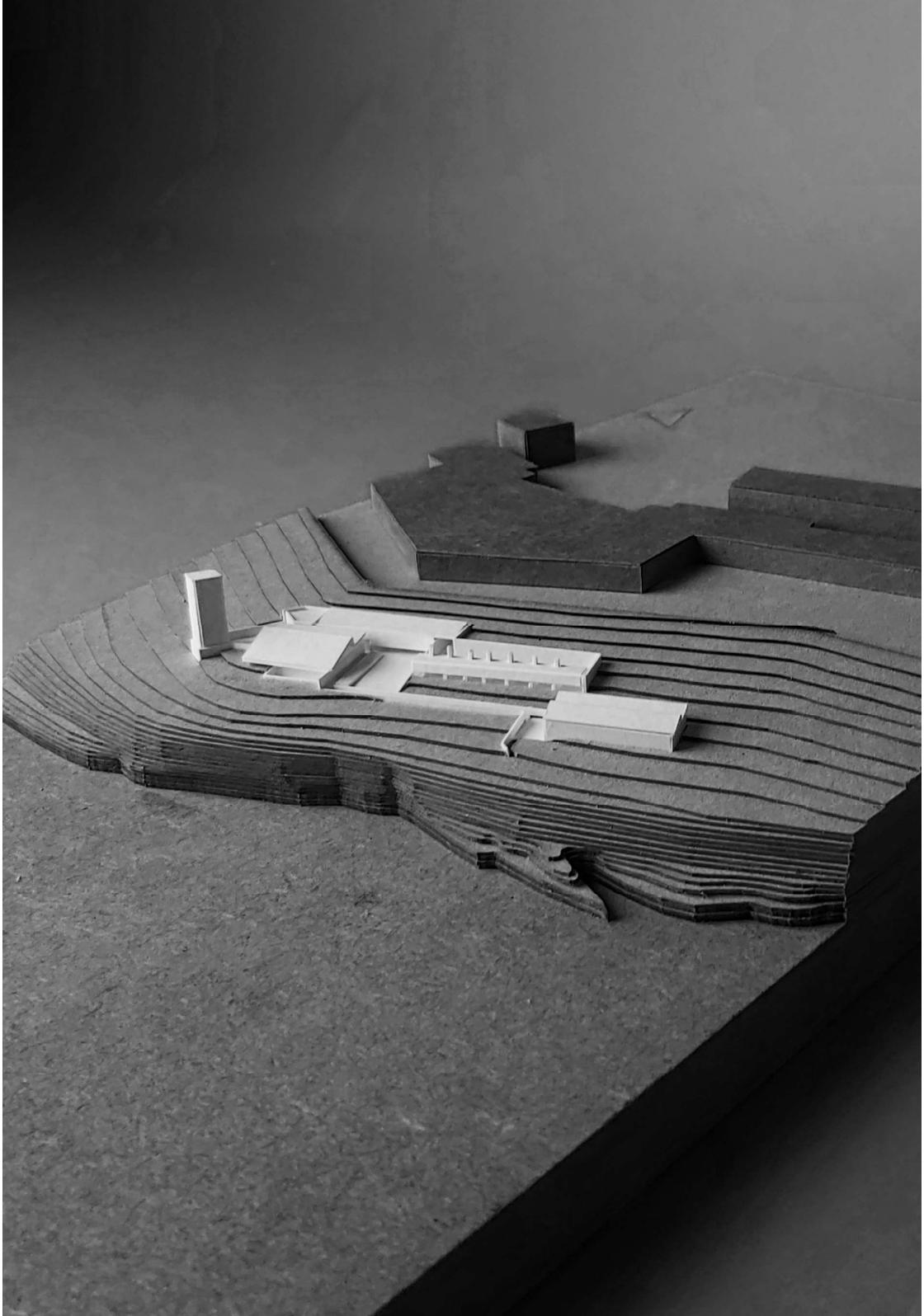
MARTHA
LYONS
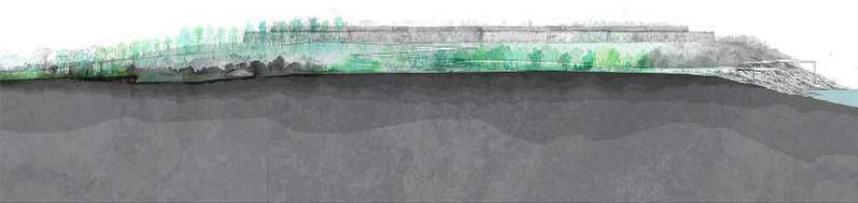
Fig 4.3.39 - 4.3.40 (top)
Martha Lyons, Contextual
Perspective and Sectional
Perspective
Fig 4.3.40 - 4.3.41 (middle)
Martha Lyons, Thesis Drawing:
Mourner's Journey
Fig 4.3.42 (bottom)
Martha Lyons, Contextual
Section

Fig 4.3.43 (opposite)
Martha Lyons, Contextual
Perspective

ELLEN
O'GORMAN

Fig 4.3.44 (top)
Ellen O'Gorman, Contextual
Model
Fig 4.3.45 - 4.3.47
Ellen O'Gorman, Assorted
Contextual Sections and
Elevations

DOLLAR
SALAMI

The Botanical Reserve is a project located in Spike Island exploring the relationship between memory, the passage of time and repropagation on a rural, environmental and human scale, set against a backdrop of agriculture and pollution. To propose a self-sufficient, educational and holistic centre located on the Western strip of the romantic landscape. In this, the proposal holds an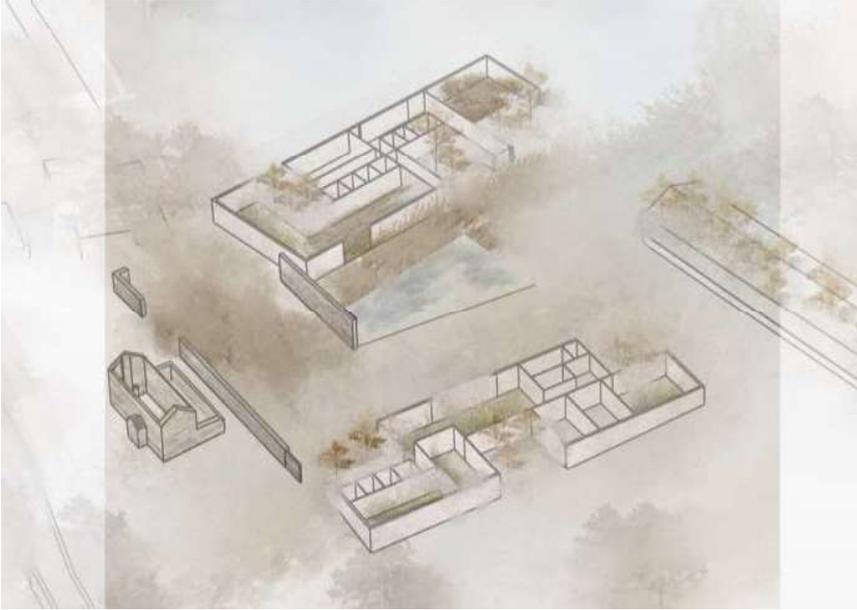 ephemeral quality. It is not a simple remediation of the human mind and body but rather a remediation of the landscape.

As such, the design of the Reserve cannot be divorced from an interrogation of its role as an object, observing the performance of the changing landscape and the simulation of reappropriation of the sense of memory evoked by the same scars of capitalism and industrialisation. This has negatively impacted people's mental health and resulted in psychological disorders. The process of remediation therefore involves a progressive re-integration of people into the landscape to enable both their own and the grounds recovery. 'A machine designed to enable its own destruction'.

Thus, the Reserve can be understood as a machine. The human remediation and the remediation of the landscape. The processes are related with the users becoming critical components to the mechanics of landscaping naturalization and the form of the Reserve negotiating and subsidizing to the conflict between controlled interior and organic exterior.

Over time in its improvement of the landscape the Reserve slowly becomes overrun by its own success and is destroyed.
- $

Fig 4.3.48 (top)
Dollar Salami, Botanical Reserve, Contextual Section
Fig 4.3.49 (middle)
Dollar Salami, Botanical Reserve, Thesis Drawing
Fig 4.3.50 (bottom)
Dollar Salami, Botanical Reserve, Contextual Ground Level Plan
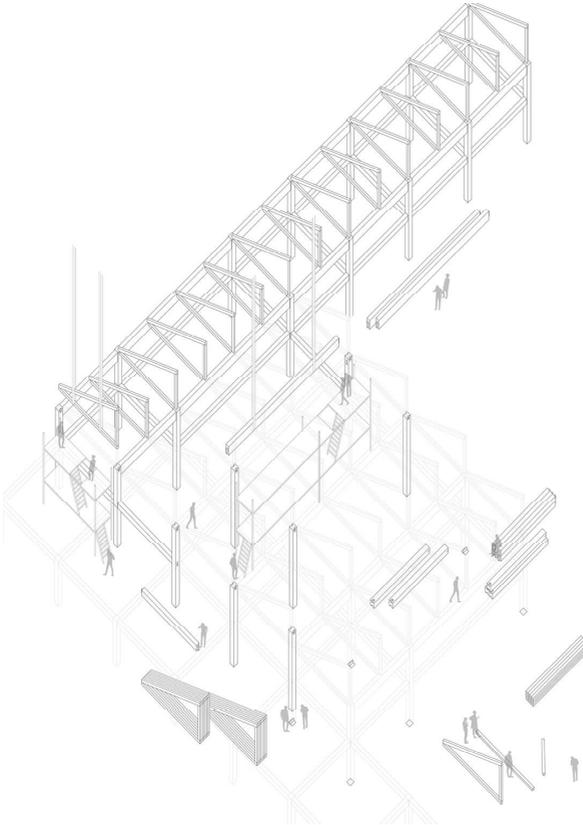
My research began with Foucalt's essay about Heterotopias and mapped my observations of the fourth principle, heterotopia as slices in time, onto Spike Island, where he talks about heterotopi as indefinitely accumulating time, i.e., museums, libraries, and the opposite heterotopias of transient time, referred to as time in the mode of festival, and likens it to a fairground that appears briefly once or twice a year and is gone again.

My research was also informed by Maurice Halbwach's ideas on Collective Memory, which led me to design a workshop that would encompass ideas of inscribed and incorporated memory, represented through represented through the action of constructing the building and then the activity inside it: learning, building, living. The workshop, built by carpenters, it then used to train apprentices. The building's shape was initially influenced by mapping activities in order: band saw, kiln, rack, smaller machinery, circular saw planner thicknesser cross cut saw, small band saw mortice machine, tenon machine, pillar drill, sander; with flexible space in the middle for mobile workbenches and larger projects.

From the development of this and expanded on the concepts I chose, developing a corresponding housing scheme was next. Their construction would be created in the workshop creating a sustainable and self-sufficient community for the island's future.

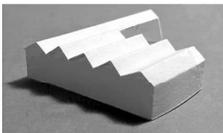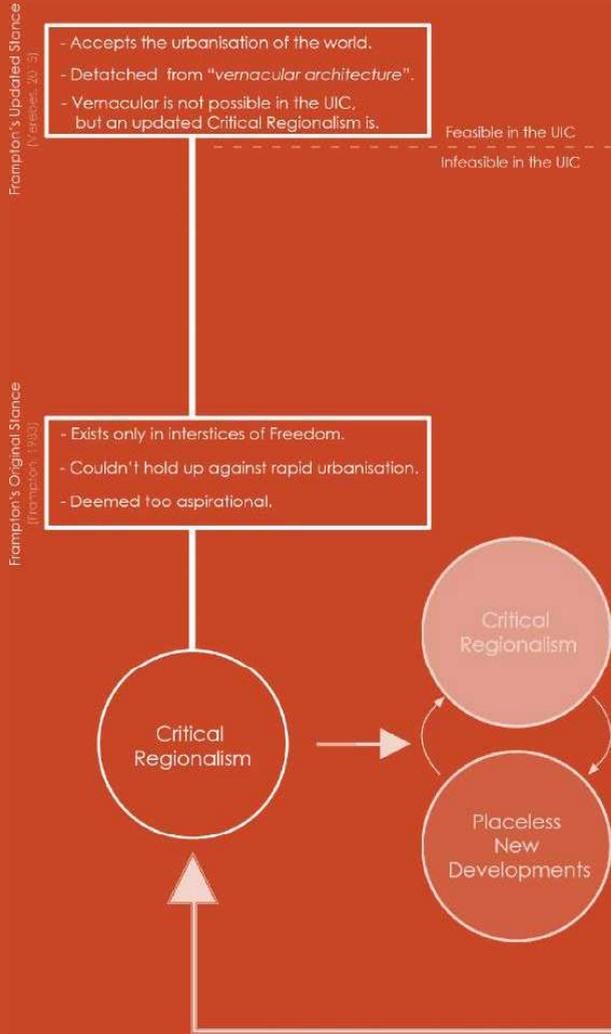

Fig 4.3.51 (opposite)
Dollar Salami, Botanical
Reserve, Perspective

Fig 4.3.52 (top)
Peter Spillane, Workshop and
Housing, Exploded Axo
Fig 4.3.53 and 4.3.56 (bottom)
Peter Spillane, Workshop
and Housing, Assorted Model
Photographs

TOWARDS A PARTICIPATORY REGIONALISM:
THE USE OF ADVOCACY PLANNING IN THE PURSUIT OF CRITICAL REGIONALISM

MATTHEW HURLEY

Tutor
Jack Lehane

Frampton's Updated Stance (Version: 2015)

- Accepts the urbanisation of the world.
- Detatched from "*vernacular architecture*".
- Vernacular is not possible in the UIC, but an updated Critical Regionalism is.

Feasible in the UIC
Infeasible in the UIC

Frampton's Original Stance (Frampton 1983)

- Exists only in interstices of Freedom.
- Couldn't hold up against rapid urbanisation.
- Deemed too aspirational.

Critical Regionalism

Critical Regionalism

Placeless New Developments

Fig 4.3.57 (middle)
Matthew Hurley, Diagram indicating the Evolution of Critical Regionalism

It is my intention to assess how methods of advocacy planning can influence the form and function of regional architecture in the Urban Irish Context (UIC). I am exploring how the use of advocacy in the planning process can be used to add regional specificity and a sense of national ownership to the UIC. The pervasive approach of urbanisation leaves cityscapes feeling placeless, either from unexceptional glass curtain wall facades or worse from the oversimplification of historic structures to the point of pastiche. This study functions as a continuation of a previous study in which I examined the validity of Critical Regionalism, as popularised by architectural historian and critic Kenneth Frampton, in a modern Irish urban context.

In the previous study I expressed how Critical Regionalism is likely not attainable in an Irish context as there does not exist an autochthonous Irish society to influence the design, our culture and in turn our architecture is the sum of a series of oppressors, ranging from Viking Settlers to Capitalistic, Platform Based Corporations. I am reviewing both the proposed and existing redevelopment of Corks South Docklands and the pertaining quaysides: Kennedy, Albert, and Custom House Quay. An examination of the existing methods of community involvement in the Cork South Docklands Development (CSDD) is undertaken to provide further insight into the state of the UIC and the prominence and potential of advocacy planning. Methods such as Tony Gibson's (1988) *'Planning for Real'* will be used to provide potential direction that could be taken to promote advocational action in an Irish context as a means of combating placelessness by engaging all members of the community, from a Local Resident to the Local Government to the Local Developer.

[1] Eggener, 2022
[2] Hartoonian, 2014
[3] Frampton, 1983 (A)
[4] Verebes, 2015
[5] Rudofsky, 1964

CRITICAL REGIONALISM SYNTHESIS

To understand Critical Regionalism's place in the Urban Irish Context (UIC), its confines and characteristics must first be explained. Eggener[1] states that the concept was first developed by Alexander Tzonis and Liane Lefaivre in *The Grid and the Pathway* (1981). The concept was then popularised by, architectural critic, Kenneth Frampton in his seminal works: *Critical Regionalism: Six Points for an Architectural Resistance* (1983 A and *Prospects for a Critical Regionalism* (1983 B). Hartoonian[2] explains how the latter text is separated into groups; the first three points, deemed "binary opposites": Culture and Civilisation, the Rise and Fall of the Avant- Garde and Critical Regionalism and World Culture, function as points of concern on the growing impact of populist architecture on the global landscape. The final three points: The Resistance of The Place Form, Culture versus Nature and the Visual versus the Tactile express how architects could incorporate Critical Regionalism into their designs.

The concept was met with significant criticism. Eggener regarded Frampton's iteration as an infeasible method functioning only in the hypothetical and heavily prescribed examples used by Frampton in his works[1]. Eggener added that these examples and practices negate the existence of societal and political issues (civil unrest, urbanisation, poverty etc...), choosing instead to exist only in "the interstices of freedom"[1]. How could Critical Regionalism establish itself at the forefront of "Architectural Resistance"[3] when it seemingly can't even hold up in the presence of any cultural antagonism? This is particularly relevant when looking at the development of Cork, Ireland, a city that has never had an indigenous society to base a regionalist style off.

Critical Regionalism and its founders have accepted this criticism and have evolved to address it. Hartoonian[2] notes that Tzonis and Lefaivre have shifted their approach to consider this growing urban sprawl, focussing now on tangible shifts of "Realism" as opposed to notions of national identity. Frampton too evolved his stance on regionalism explaining in an interview with Verebes[4] that the idealism of a Rudofskyan society of non-pedigreed architecture grounded in agriculture is no longer applicable when over 50% of the world exists in an urban context. Frampton asserts that Critical Regionalism is not a vernacular, as described by Rudofsky[5]. A vernacular is "intimately integrated with agriculture"[4], Critical Regionalism is not. By this logic, we can deduce that Frampton believes that Critical Regionalism is still possible within this new urban setting however vernacular architecture is not.