Úna Breathnach Hifearnán
Student Number: 09002201

Reclaiming | CONSTRUCTED Wilderness
Míntíríú an Dúlra Fhiáin Tógtha
My thesis entitled "Reclaiming | Constructed Wilderness", looks simultaneously at the notion of wilderness and of the construction and preservation of such; to create a better reality for our country through proposed architectural intervention.

I analysed my interests in the relationship of nature and architecture; at places constructed by man which were inevitably being reclaimed by the overpowering force of nature. I am fascinated by the edges of our architectural interventions, of the boundaries that they create within the context of their siting and how we can blur such so that we may achieve a symbiotic relationship with nature. The ecotones between habitats and biomes both those real and constructed were where my interests lie.

I read a number of sources around the topic, authors including: Gilles Clement, Arundhati Roy, Rachel Carson, Ian Mc Harg, Eugene Odum and Aldo Leopold. In reading on disintegration and natural processes in biomes, I was inspired to create architecture which may pay homage to these natural occurrences all around us. I used reed beds to further cleanse water in the lake within the site and proposed to farm and feed the land so to validate living in this place. The final paper goes through my theoretical written idea and also aims to illustrate and annotate my design process. Finally it shows the drawings and architectural models which I constructed to represent my final thesis proposal and physical representation of the theoretical standing.

My thesis project is about using architecture to reclaim wilderness in a place seemingly natural but that in truth is created from a number of unnatural processes, sited to the West of Limerick city within the Irish cement factory compound, my project emerges from the soil. The buildings act as a new topography on the site, one to be walked over; to allow people to experience what is there in a new way. They also act as a framework for nature and would allow for the eventual reclamration of wilderness on the site, thus giving it back to nature.

The final aim being that the project acts as a critique of those places where we ordinarily wouldn't or couldn't live or inhabit; to site something in a place that is created from a number of unnatural processes. The result of this thesis and research I find categorically lies in ways to deal with disused industrial space and abused sites within our country. It looks at using a new method of constructing a topography of place that will heal the damage which has been done to the site on which it is located. To use architecture as a tool for nourishment of land in collaboration with that which we perceive as wilderness, that can reclaim the framework of architecture and through its disintegration create a new reality of place, one imitating metabolic processes of nature.

“Not only is another world possible. She is on her way. On a quiet day I can hear her breathing.”

Arundhati Roy
Redarming CONSTRUCTED Wilderness
MINISTRY BEN DUKRA PHILANTHROPI
Ha Breathnach #1theamien
ACKNOWLEDGEMENTS

I would like to thank all of those who have encouraged and assisted me along the way.

With special thanks to Irene Scudder, Tom Mayan and Ceezen Boston.
Architecture for me means to shelter, to enclose to delineate one space from another by means of division and simultaneous connection. Connections of places and of boundaries that previous to its resurrection are unimaginable, impossible even.

Architecture needs to not only be placed on a site and to address the site but to sit within a site to be part of that very site. A parasitic entity which not only takes from its host but feeds it.

I am fascinated by the notion of wilderness of the natural unnatural that exists all around us today as a result of man's intervention and nature's ever overpowering ability to reclaim that which is built upon it.

Constructing wilderness fascinates me and the possibility of intervening in such a reality and creating a new, which meshes together architecture and landscape in symbiosis with one another.

I am proposing a new living place and extension to Limerick city at Castlemungret, Co. Limerick. The site which exists there, within a cement factory compound is one of many overlaid layers of man-made landscape. With a man-made lake, a quarry, a motorway tunnel which slices through the site, a waste water treatment plant, a cement plant and bordered by the river Shannon to the north.

I would like to create a new sort of world there, a microcosm: a place in which people may live in a new way. In close proximity to water and in direct contact with the land on which the project as proposed shall sit. It will look to creating a number of climate zones and buildings in the form of skins which act as shelter for the inhabitants. It will open up this cul de sac in the city to the people of the city and others. The project will take hints from the architecture of early settlement and of hedgerows as a way of dividing space. It will create a path, an inhabited one. Living in this place will mean both individual and collective experience will be had, one where a notion of a forum for discussion and interaction will be to the forefront.
To design a new living place for Castlemungret, co. limerick, to live in a place where you couldn't before and possibly shouldn't. To set up a new reality for this place: one where boating is still relevant. In which the water is used as a key feature to open up this cul-de-sac in the city to the people. Arriving by boat you enter the site to a number of new realities and possibilities.

The project will look to a given moment in the current society in which we have created many man-made realities which are then reclaimed by the natural wilderness and end up appearing as real and natural as any other reality which may have existed on site.

The project aims to add a new layer of landscape and of topography to these realities, an architectural landscape which will act in symbiosis with the nature of the site crossing over boundaries and blurring them and using and reinstating those historically one existing slowly crawling boundaries of the hedgerow, using its early inhabitation as inspiration for dwelling. The architecture will aim to cleanse pollutants on the site and address a new form of living in close proximity to water.

I am designing three groups of dwelling on the site that of the permanent for a capacity to 1000 inhabitants, that of the temporary to the same capacity, finally that of the transitory which could host an event the site of the city to 5000 inhabitants.

The hierarchy of space should delineate over the site all the required functions. The project will be about a path, a path somehow representative of life, death and birth in architecture and in process. The three groups will be woven together with a mix of robust and delicate elements.

It will project a speculative future using densities and porosities with a project cleverly using adjacencies and crossovers between groups and their respective paths.

Architecture and landscape proposals will be simultaneously present and ever blurred somehow representing the possible ambiguity of architecture.
### Schedule of Areas

<table>
<thead>
<tr>
<th>What is LIVING? in Permanence</th>
<th>2. TEMPORARY LIVING FOR 1000 PEOPLE</th>
<th>What is LIVING? in Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PERMANENT LIVING FOR 1000 PEOPLE</td>
<td>Individual SLEEPING 7800m²</td>
<td>Individual SLEEPING 20,000m²</td>
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<tr>
<td></td>
<td>Toilet Facilities 400m²</td>
<td>Toilet Facilities 2000m²</td>
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<td></td>
<td>Shower facilities 252m²</td>
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<td></td>
<td>Kitchen (communal) 720m²</td>
<td>Kitchen (communal) 2000m²</td>
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<td></td>
<td>Dining (communal) 2560m²</td>
<td>Dining (communal) 4000m²</td>
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<td>Laundry 360m²</td>
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<td>TOTAL 12092m²</td>
<td>TOTAL 29000m²</td>
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### Permanence

<table>
<thead>
<tr>
<th>What is LIVING?</th>
<th>10.8m²</th>
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<tr>
<td>Individual SLEEPING space (per person)</td>
<td>10.8m²</td>
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<tr>
<td>Bathroom (per person)</td>
<td>4m²</td>
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<tr>
<td>Kitchen (communal)</td>
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<tr>
<td>Dining (communal)</td>
<td>2560m²</td>
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<tr>
<td>Community room</td>
<td>2560m²</td>
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<tr>
<td>Homework, playing, meeting</td>
<td>2560m²</td>
<td></td>
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<tr>
<td>Laundry</td>
<td>360m²</td>
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<td>TOTAL 17600m²</td>
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### Transitory

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<thead>
<tr>
<th>What does LIVING need to LIVE?</th>
<th>20,000m²</th>
<th>2000m²</th>
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<th>2000m²</th>
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<tbody>
<tr>
<td>Farming</td>
<td>125,000m²</td>
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<td>Growing of crops</td>
<td>125,000m²</td>
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<td>Food processing</td>
<td>5,000m²</td>
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<tr>
<td>Facility</td>
<td>Area (m²)</td>
<td>How to get to LIVING?</td>
<td>ACCESS FACILITIES</td>
<td>TOTAL AREA OF PROPOSAL :</td>
<td>TOTAL INTERNAL AREA :</td>
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<tr>
<td>Cafe</td>
<td>200m²</td>
<td>5.</td>
<td>Pier on site</td>
<td>3000m²</td>
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<td>Market Space</td>
<td>900m²</td>
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<td>Pier in city</td>
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<td>Energy Garden</td>
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<td>Forum/Conference Centre “Big Room”</td>
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<td>Work spaces (50)</td>
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<td>Research Units (20)</td>
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<td>Creche (50 children)</td>
<td>300m²</td>
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<tr>
<td>School Rooms</td>
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<td>Laboratory classes</td>
<td>150m²</td>
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<td>Art room</td>
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<td>Library (10000 books)</td>
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<td>Offices for Forum</td>
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<tr>
<td>Storage</td>
<td>400m²</td>
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<td>Services</td>
<td>400m²</td>
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<tr>
<td>Stages (10)</td>
<td>1200m²</td>
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<td>Dovecotes</td>
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<tr>
<td>TOTAL</td>
<td>530,220m²</td>
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<td>620,192m²</td>
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- Water • Access by reed beds to cleaned water in reservoir
- Drainage • Dirty water drained into system to be cleaned by reed bed purification and to be recycled
- Pier water access • Access to site to be by water; bicycle.
- Path trail (Public space) • A path to lead from the pier and to meander through the grounds en route to the re profiled quarry “sanctuary”
- Quarry habitual living • Dovecotes and reed beds on a timber construction cantilevering
NOISE POLLUTION

Quarry - Needs re-profiling to be used as habitat
Cement Manufacturing plant - Will be decommissioned in about twenty years
Motorway Tunnel - To be bridged over

ODOUR POLLUTION

Water Treatment Plant - 12 hA
Outlet Jetty for water treatment plant

OTHER PARAMETERS

Bunlicky Clay pit lake - To be reprofiled as a habitat for living 50 hA

River Shannon

Total area of site = 4km²
DESIGN LOG

WRITTEN THESIS
“What kind of environment and which earth will we bequeath to future generations.”
Gilles Clement

Reclaiming Wilderness
Grey & Brown = Green

When I think of Architecture, no longer do I imagine a building per se or the epitome of what I once thought architecture was representative of, but something more systematic something not invasive, which is gentle to the soil on which it sits, soft in configuration and with a equally gentle program as delicate as its construction.

Our world is changing. Our habitats are changing. Our Éire has been manipulated and neglected by the wrath of a failed globalisation of a performed gentrification and a greed of a nation and outsiders which scarred our shores. Can we heal those wounds by accepting the diversities which have been bestowed upon us and make a move to increase further this diversity and to rejuvenate our soil using the powers supplied to us by our very nature, by the spirit of this powerful Oileán who weeps in her sleep. Let us not condemn the powers of change or neglect them. Let us use them to fuel our future through diversification of the very places they seduce and abuse. To work not with what comforts us but with that which terrifies us.

We architects are typically interested in how we can create a better reality for a place, in how we can negate the current situation and improve it by means of architecture. Why do plants grow where they do to create the space in which we inhabit?

1. Ethical LANDING

In Sand County Almanac, Aldo Leopold proposes a Land Ethic. Just as we have human rights which we try to protect, he suggests that we should also protect the lands which we inhabit and that they should be no less important than that of our own rights. Leopold suggests that we may extend ethics to mean a struggle for existence of all species and that this includes plants and animals. Leopold writes about having a test site where we can judge how good a piece of land performs, “In many cases we literally do not know how good a piece of land performs. In many cases we literally do not know how good a performance to expect from healthy land unless, we have a wild area for comparison to a sick one.”

Can we create a cleansing architecture? Architecture which will grow from the nature itself, which not only responds
to but clings to the site on which it becomes articulated, seeming ephemeral which has a certain respect for natural habitat edges and principles of the hedgerow, softly crawling to morph habitats of man’s interference. An architecture which will also run in a cycle of life and of death, its sole purpose to meditate the relationship between human kind and earth of society and soil.

I want to examine a subject somewhat unstudied in nature; the way we live and that of death, how that can be translated to the notions of landscape abuse and what proposing a new sort of architectural landscape may do to aid the reclamation of a wilderness type of existence. Gans and Weisz describe in “Extreme sites”, brownfield sites as, “The mine, the port, the river bank, the coastal site, the agricultural field, the landfill the dam and the campsite. They are extreme in there circumstances because they are simultaneously damaged yet at the centres of human concern, theatres of often cyclical will to Plan, Build, Grow ,Prosper and Abandon.”

I would like to look at such sites, the wasteland of globalisation and to use them to prevent societal collapse and decline. Sites of a so called third landscape within which we can create a fourth landscape for survival, which does not only end at abandonment, but continues in a cyclical process with abandonment being only a mere seed of a possibility; a death to be reborn, a new life to begin, a life where place and action are bound. Brownfield sites are those sites that are”extreme in their circumstances because, they are simultaneously damaged, yet, at the centres of human concern”, which have been abused until they have no more life left to give. What if there could be a systemic architecture that can save these sites? I am interested to create a symbiosis between society and soil, through an architectural intervention on a site of a latent condition that of the brownfield, which can nourish the very land on which it rests; one which can repair our weeping country.

Jane Jacobs analysed cities and the phenomenology of cities. Her views have something in common with the land ethic of Leopold in that she expresses the relevance of comparing a phenomenon to a similar site which is missing an important element. “Sometimes you learn more about a phenomenon when it isn’t there, like water when the well runs dry or like neighbourhood stores which are not being built in our redeveloped city areas.”

in the first semester i looked At A number of Alternative projects on various sites where the Abuse of mankind And reclamation of nature was to be seen.
Leopold proposes that, “Wilderness is a resource that can shrink but, not grow.”

In *Environ(ne)ment*, Gilles Clement elaborates on the notion of a third landscape, and of the sites where this is a possibility. Those,

“Leftover/transitional spaces in the city and countryside, they are key to restoring the complexity and biodiversity of our natural landscape, which have been threatened by agriculture/urbanism and suburban development.”

I want to analyse “the role of humans to their environments”, the habitat in which we live. Environments we have given ourselves the right to manage. We should be in harmony with nature, in so far as possible and aim at providing a framework for fostering wilderness, reverting back to nature and in so doing allowing our country to replenish itself; to make space for that unanticipated event to come. Such spaces, according to Clement, are the “carriers of our biological future” and I concur. I see the preservation of sites of such a third landscape, as a biological necessity, like a reservoir as such for the biome; country and the planet.

He discusses a “Symbiotic Man”. Man here meaning that dominant power in a landscape or system which becomes undermined from within, this which then collapses. On breaking the system; man invents new models of exchange. In the life cycle the tree or the man then returns to the environment from which it takes energy, renovishing it. The symbiotic man answers the question as posed by the planetary garden, “How to exploit diversity, without destroying it?”. The environment or man, constantly recycles energy without any accumulation of waste. The system then exchanges directly with his neighbour for cultural enrichment of society. This new economy is characteristic of a symbiotic man where “A dead leaf on the ground is not waste it is food”. When one system is doomed to ruin; another is born.

In a symbiotic landscape, “Species that cover the earth and clutch the soil and humus, can play, if they wish.” “We too can play, but, not at the cost of other entities. Wilderness was here first and will be here long after we are gone that is; if we let it. Clement’s Manifest der dritten Landschaft, (The Manifesto of the Third Landscape), examines the landscapes, and then arrives at a conclusion that we ought to preserve
the third, being of the most “diverse”, which will sustain our future.

Why not go on to a fourth landscape; to overlay an element of an ephemeral, architectural landscape which when it dies would give birth to a fifth landscape, of a new form of decay, a decay which may be able to nourish and to heal the lands which we have exhausted and scarred; that of the brown and of the grey. Third Landscape is the way that nature reclaims that which is built upon it.

“The indefinite character of the Third Landscape has its source in the fact that the evolution of ancient biological beings which constitute an existing territory, is given freedom to exist, so that human decisions are excluded consequently.”

2. LANDSCAPE Natural vs. Constructed

Landscape which I discuss here is something of a constructed term to express a natural reality. In this understanding landscape may also refer to something seemingly unnatural on first observation.

A number of definitions are necessary I find to move further. Landscape for me is a combination of two elements those being Nature and Ecology:

Raymond Williams defines nature as “the material world itself taken as including or not including human beings” ; “what man has not made”.

The term ecology developed from the notion of habitat and “became the study of the relations of plant and animals with each other and their habitat.”

The word wilderness (Old English wildēornes ‘land inhabited only by wild animals’, from wild dēor ‘wild deer’ +-NESS) is much contested. Many would argue that wilderness in the true sense is something which no longer exists and which merely refers to a situation or time long gone before of which we as humans hold no comprehension. Wilderness is a sublime, romanticised notion of ecology. It looks at the permanence or durability of nature and the transience or mortality of human life.

“People are so vast and we have so much to say to each other.”

Mostafavi in Ecological Urbanism, deals with a notion of why we would want to create a restored ecological
situation within our cities. In so doing he begins to look at settlements of mankind and the vast sprawling notion of the city. This also refers to a critical ecological situation. It is evident in our abused sites: mines, quarries and landfills in which where we deposit waste or excavate for our needs. If we were to create a new form of habitat or microcosm on a site of such a critical ecology it is necessary to have an element of memory of that gone before and in some ways of that having never existed, the wilderness. The site then, "acts as a mnemonic device for the making of the new". What is resulting “is a type of relational approach between the terrain, the built and the viewer’s participatory experiences”. Waste is a huge issue for today’s world, it can be used as a measure of who we are and of what we are doing to ourselves. We consume; dispose of and ignore. As Mohsen Mostafavi observes, “Who really has a sense of the mountains of garbage that are produced by most cities, out of sight, out of mind. If we don’t see the garbage of our culture both literally and metaphorically then we are not confronting the reality of what the garbage actually says about us.”

Nature and the preservation of the wilderness needs to be a fundamental concern of our collective design ethos. We need to recognise the place of humankind within habitats and to create a new social model for reform of the way in which we design, ecologically.

Kwinter says “There can be no ‘ecological thinking’ that does not place human social destiny at the heart of our posture towards environmental context”. In the essay entitled “the Return of nature”, the notion of architecture using the demystification of the ecological to portray the true possibilities inherent within the projects articulation is described.” In the similarly named “Return to Nature”, the architects propose “a claim on behalf of nature”. The architects wish to accelerate the process of decay and reclamation to preserve the site, which was a military fortress strategically located on one the highest hill at the southern edge to the Palestinian city of Beit Sahour in the Bethlehem region. To preserve it as it is with all of its controversy intact, to allow the nature to flourish and for wilderness (aided by man) to reclaim the site

“Given the competing claims for the site, and the controversial militancy around it, our intention is not to renovate and convert the base to
another function, but rather to control and accelerate the process of degradation, disintegration and overgrowth.” 19

Petropolis, 20 an evocative documentary film by Peter Mettler, looks at the Alberta tar sands, in a new light, subjectively; interesting considering the definite environmental impact of the processes involved.

Mettler creates a sense of being petrified and somewhat alone like a bird, gliding over a vast expanse of forest and fog, then seeing a land torn apart, a land so full of industry, of waste, destruction. He expresses to us the harsh reality of monopolised landscape through imagery: Land stripped back for large chasms of open pit mining: Like a sea of holes in what would have once been a forest, now, a wet muddy bed of GREED.

The bitumen upgrader emits tons of smoke which are reminiscent of the fog that had disguised the forest. There is a constant presence of the noises associated with extraction, buzzing in the background. We observe the moving of trucks over the land and how this inscribes each layer of landscape with a new reality which we see in direct relation to the white noise of regrettable cleavages of industry. The tar is as a harsh line on the land, natural, yet stripped back so much, it is revealed as an unnatural image. It raises awareness of an inherent although ignored problem, that of the human greed to exploit nature, instead of fostering a symbiotic relationship with that very nature.

The nature of this place becomes that of industry, of the vast abused wasteland. Mettler uses only very select narration of the explanation of flying as flying ironically is fuelled by petroleum. Through this film” we are presented with a new perspective of a landscape which we cannot comprehend from the ground.”. We look at the imagery of the abused landscape which has been altered by industry, “in the forest which used to stand here a chemist named Karl Clarke spent much of his life trying to figure out how to extract bitumen from sand…. Before his death in 1968, Karl Clarke told his daughter Mary that he could never revisit this Place. (the forest where the tar sands now lie)” The film ends on an inquisitive note, “The expected life of the sun is 15 billion years we (humans) have made ingenious use of bitumen for 80, what will we do next?” 21

The reality of our consumption and our ignorance to the waste which we produce is something known to all nations. The question should now be of remedy as we cannot bring back the past.
“Not only is another world possible. She is on her way. On a quiet day I can hear her breathing”

Arundhati Roy 22

In "Oil City Petro-landscapes and sustainable futures" Michael Watts looks at the notions of cities dependent for articulation and perhaps survival on oil. He discusses the notion of oil as a commodity which became laundered. Balzac explains this as “The secret of great wealth with no obvious source is some forgotten crime. Forgotten because it was done neatly” 23 These cities have an associated petrolic landscape, such as that of the imagery I described above, “a landscape of lines, axes, nodes, points and flows” 24. These become somewhat residual and abandoned like the mine, the quarry, the landfill; sites of abuse and turmoil; apocalyptic even. There is however something in these landscapes.

Ed Burtynsky photographs such landscapes and aims to explain what life they hold, “Between the natural landscape and a man imprinted landscape. They become leftovers after the banquet, residual territories, not quite dead, as they regenerate, they begin to generate a new life, but it is a compromised one.” 25 Ed Burtynsky has a fascination with petrolic and manufactured landscapes. In the film “Manufactured landscapes”, Burtynsky looks the landscape of manufacture, how we create these places, how these places create things and how these things in turn shape us. In his film Burtynsky shows us the monotonous landscape of the factory, the camera moves as goods would on a production line. The film is depicting a particular type of nature, that having been manufactured and created by its process. By creating this film, Burtynsky hoped to “bring appreciation for what nature represents. We come from nature. We are part of it.” Raising awareness that “If we destroy nature we destroy ourselves”. Burtynsky chose to represent, in particular, manufactured landscapes because they best represent “who we are in relation to our climates”. In this film we are presented with a chance to comprehend a very different landscape. Burtynsky is interested in portraying “surreal landscapes” which have been “totally transformed by man”. In his work he creates images which in turn bring those other “landscapes into our consciousness”.

In his film we see workers in a factory produce goods with precision, focus, repetition. The expression on the worker’s faces shows such a process, machinelike behaviour.
We are repeatedly shown the hands of the worker, the human side of this landscape, the involvement of the somewhat natural. Hands that clean, produce, refine and assemble. We see all these workers as a collective yet, we also clearly have a direct view of the individual process within the communal setting. We are informed however that this film is in itself a manufactured landscape as we hear Burtynsky discuss the shots, this is a subjective landscape portrayal. “Everything I am doing is connected to the things I am photographing.” The landscapes Burtynsky photographs and depicts are “intentional”. Whole cities in China were being moved to make way for a reservoir and he shows us this reality where people were paid by “brick to take their cities apart”. The harsh reality of a manufactured landscape. “We are changing the planet, the air, the water, the land and not just china, the world at large”.26

3. Habitual Living : EDGE

A different world is necessary if we are to continue to live within habitats, respect the edges of these habitats and start to mesh such edges together to create new realities using architecture as a tool to do so.

Kongjian Yu, China's pre-eminent landscape architect, writes on the notion of the “bigfoot revolution”, as something which goes against the norm as expected of an urban society we have lost the understanding of what it is to live and survive in a habitat, of the habitat’s very essence. We need to respect our habitats and through living in symbiosis with them and respecting their inherent beauty we will have a more resilient landscape and world: “We replace native ‘messy’ and productive shrubs and crops with fancy flowers that bear no fruit, support no other services, and serve no other function than pleasing human beings; and we uproot hardy wild grasses and replace them with smooth ornamental lawns that consume tons of water.”27 Thus, we create a little foot habitat to live in. However, little feet are deformed and are on a path to death big feet were the original, the wild, in which nature had intended, and so that is what we should look back to in time of crises.

We now need to become more aware of natural systems and to foster them Ingber describes the differences between a design of nature and that of mankind.

“Humans build with structural materials, and
then add separate systems for temperature, cooling, plumbing, electricity and communications. Nature builds with multifunctional materials that provide all of these functions simultaneously.”

In the essay, “Nature Culture” by Kathryn Moore, again this notion of a close association between us as humans and nature is explored, as nature being “what we make of it.” It discusses nature as something which is also affected by culture over time, in that: “Landscape is not only the physical content…it also reflects our memories and values, the experiences we have of a place as citizens, employers, visitors, students, tourists. It is the material, cultural and social context of our lives.”

Cultural nature and a need for memory or a residual excess in renegotiations of existing space exist because, “the quality of our environment is directly proportional to the quality of our lives.”

Lister looks at the idea of land-scraping, of scraping away the existing land to make the architect’s palette-to then create insurgent ecologies which have an inherent hybrid capacity for resilience through articulation of a tension of nature and culture in which we “honor the land that sustains us.”

In Panarchy: Understanding transformation in human and natural systems the inherent yet not necessarily beneficial relationship of the human to the natural environment is explored. It looks at people and nature as the culmination of an ecosystem and this henceforth as a social system, examined in terms of quantity and quality. As “there is no such thing as nature separated from human social processes.”

The adaptive landscape within ecosystems has been and is continuously transformed, “ecosystems are defined as places on earth that consist of biotic components (life) and abiotic or physical components.”

Humans simultaneously depend upon and change or destroy their own habitats. Humans have an advantage over nature in that we are sense making individuals, “While nature has the capacity for remembrance, humans and human systems have the capacity of consciousness and reflexivity.”

In the Iconography of landscape Peter Fuller’s essay “The Geography of Mother Nature”, gives us another perception on the notion of nature. He elaborates on a lot of John Ruskin’s thinking.

“THERE IS NOT WEALTH BUT LIFE”
This statement related to his witnessing of total awe of nature of its sheer brilliance and virginity. Ruskin’s views of nature changed as he realised that there was in fact nothing serendipitous about it, it was as it were. “Ruskin was dogged by a sense of failure of nature, as it were feeling that nature had been reduced to the grey lifeless monotone that so repelled him.”37

When we discuss nature and wilderness we may over sentimentalise the idea of something serene. Ruskin was before his time in realising that nature was something which was and would be further corrupted. Fuller describes that: “Ruskin’s perceptions that the actions of men might be leading to a real failure in nature, and to a potential annihilation of human life, may turn out to be his most prophetic insights into this era of acid rain, ecological devastation and potential nuclear winter.”38

Brown and Harris in *Tackling wicked problems through the transdisciplinary imagination* discuss what through using combined minds we can do to solve the problems we are currently experiencing globally. As “There is little left untouched by us. We are surrounded by the artefacts that support our lifestyle; the haste of the city... the faceless masses driven by the transactions of city life. This is the world we have designed”.39 Is there a different world possible? There is an analysis of how we deal with our habitats needed as they can no longer cope and will fail to sustain us, “Wittingly or not, the everyday demands that we place on landscapes strongly influence, how they change over time, and the capacity they have to meet other demands, including other and future human wants.”40

4. DECAY: Decomposition of thought and scars

When we think of decay we generally imagine something natural decomposing. However, what if that which decays is something more unnatural something more of a constructed nature, of the haste of our cities.

In *Design with nature*, 1969, Mc Harg defines nature. He goes through nature as milieu, as life, as teacher, and as residue of times past. Of nature which is, “more resistant to man’s smear, more resilient”.41 Man is the most destructive
and exploitative force on nature. As McHarg writes, “Nature is a faintly decorative backdrop to the human play”.42 We get an idea that the entities within each ecosystem are in fact indispensable. “Let us think then of the atmosphere as the skin of the earth, the outer membrane of the biosphere”43 something which is always evolving. So we too can imagine architecture as a system, a skin or a blanket which is ever-changing.

“Water and air move through all life, the air surrounds and permeates us, the waters replenish that cistern which is ourselves.”44

There is also death to consider because as long as we are living beings we will die. “Death is necessary as is the decomposition of wastes and the matter of recent life.”45 Evolution is necessary for us to appreciate the increased consciousness of nature. I started to think now of architecture as a cycle, if it were a skin through which things pass by osmosis, a healing skin or blanket that smothered pollutants and created nutrition on a site with a shifting landscape, always decomposing. “The cycles of life, death and decay recycle the increasing storehouse of ordered matter.”46 Mc Harg uses the representation of a capsule as an alternative earth in which there should be “no depletion of resources”.47 He recognises the earth as a creative process and all its processes also as somewhat creative being,” a self perpetuating evolving system48 Consumers and producers in this line of thought are also creative and “life persists because life eats life.”49 We should remember that “Nature is our creation and we shall dominate and subjugate it for that is our divine destiny”.50

Currently we assume man as ever triumphant. We need to approach things more holistically and look for a symbiotic relationship in way of dictatorship. We need to respect the land as mentioned when I discussed Leopold’s land ethic. We can approach design in a new way “Let us ask the land where are the best sites”51 Odum wrote on the Fundamentals of Ecology. In this text he explains to us the overall notion of ecology as we now understand it and as I tried to define earlier. Something which I was particularly interested in was the fundamental process of decomposition, of breaking to particulate detritus, of morphing to humus, and then through mineralisation, finally decomposing. Decomposition is an absolutely vital function, because if it did not occur, all the nutrients would soon be tied up in dead bodies and no new life could be produced.”52
Another aspect of interest is what is happening at the edge of one biome to the next, on the peripheries, where the elements are as I imagine softly crawling.” An ecotone is a transition between two or more diverse communities”. Where this occurs “the tendency for increased variety and density … is known as the edge effect.” Parasites are things which feed from a host, maybe adding a parasitical intervention to a damaged site could be something which heals by its very gesture.”One person’s trash basket is another’s living space.”

There is a wilderness created by the sea of trash in a landfill, a coarse wilderness but one that can nevertheless be inhabited. In the journal article, Rewilding at the Urban Fringe, the writers suggest that wilderness is something which could injected anywhere “No tract of land is too small for the wilderness idea.” As discussed previous wilderness is now a romanticised idea but which “is viewed as an area where natural processes are permitted to operate without human interference.” A notion of rewilding is explored and its management. However, the process is thought of as static which for me causes a crisis of identity as to how a process about something so ever changing could ever be termed static. It confronts directly sites of third landscape where designers may be able to speed up the decomposition of man made elements to allow re-injected wilderness to thrive.

“What both landscapes and the way we construct them in our minds are constantly evolving”

William Cronon rethinks the human place in nature in his book Uncommon Ground. He explores the romanticised notion of wilderness as “an island in the polluted sea of urban-industrial modernity the one place we can turn for escape from our own too-muchness.” For Cronon it is somewhere “a refuge we must somehow recover if we hope to save the planet”. He acknowledges however that it is a predominantly human construction that “could be contaminated by the very stuff of which its made”, that is if it is over sentimentalised as a construction.

The world we now live in is in no way a natural one, “Whereas earlier generations inhabited a natural world that remained more or less unaffected by their actions, our own generation is uniquely different. We and our children henceforth live in a biosphere completely altered by our own activity, a planet in which the human and natural can
no longer be distinguished, because the one has overwhelmed the other.61 Cronon discusses the idea of home and that we need to think of our habitat as home in order to “live rightly in the world”, as home is “the place in the world we try to sustain so we can pass on what is best in it to our children.”62

In *The Social creation of nature*, Neil Evernden looks at where the idea of nature comes from and uses the story of the child maturing as an anecdote for our recognition of our surroundings and of that non-human reality. “The idea of a naive infant may be a fiction, it is at least a useful one for our purposes, for it allows us to imagine the encounter of an non-enculturated human with ‘nature’.”63 We can then appreciate “the importance of immersion in nature to the creation of an individual human”64 in that it helps the child to realise “there are things in the world that are not me; that there is other”.

5.LIVING: Resilience and Residue

So what then is nature, as I have discussed it is not only that of the natural but of constructions which are cultural and otherwise influenced by change over time. However, not matter what we see as nature or natural or habitual we also must appreciate that we must live in such places. When we do so we test the resilience of the so called nature or natural and we leave behind residue with every change to the so called natural we make.

There have been many efforts to contain the Mississippi over the lifetime of its growth. The river evolves and will not be contained but in the human mindset this is mere irrelevance and designers and engineers pursue to contain it. The efforts are all part of, “inhabiting an enigmatic landscape”65, one which moves and shifts. “Mississippi Floods: Designing a shifting Landscape” looks at “how environments inhabit people”66, which is maybe what we should consider, rather than it being vice versa. As the river is not only flooding but “remembering”, just as we do and wish to when we create a new piece of architecture, we maintain the residue of the past, clinging to it. It is a method of cognitive flooding which has occurred over and over, the dichotomy of nature after all and that which we so praise; As is the rush of the “imagination, our flooding”.67

In 1938 Vernadsky wrote an introduction to “The Biosphere and the Noösphere”, where he expresses that he
Ironic is that we still have not really reached this realm I find. The biosphere is the place where we live now and did then, the only place where homogenous living matter exists. "Man tends to increase the size of the biosphere", to suit his own needs. It contains all heterogenous matter whether living or inert. "The inert matter greatly predominates" over the living and they involve fundamental differences in their "spatio temporal manifestations". The biosphere is in fact the only terrestrial envelope where life can exist so why do we abuse it? "Man cannot be separated from it". We are connected to the biosphere and to one in another in indissoluble connections and henceforth why "life is a cosmic phenomenon somehow sharply distinct from inert matter". The concept of the Noösphere looks at mankind post-war and how the residue and abuse is to be dealt with. It is a new realm where thinkers may take part in a terrestrial geological process in an intensive and systematic way. The idea of life is linked to living matter, organisms and to evolution, which does not occur in inert matter. Vernadsky implies that we should pull together to look for change in what the masses require. Societal change is necessary to make any physical change is what he aptly perceives. Man is striving to emerge beyond the boundaries of his planet into cosmic space. And he probably will do so.

He acknowledges we are entering the Noösphere and that we should pull our resources together and face the future with confidence. This somewhat relates to the post boom period to when we are on our way to recovery we once again need to enter this realm of Noösphere, where, human brain power resumes the role of shaping its own future and environment, in this "Anthropocene", a term coined by ecologist Eugene Stoermer which serves to mark the evidence and extent of human activities that have had a significant global impact on the Earth's ecosystems. The article discusses the notion of the Anthropocene as a human dominated ecological epoch, supplementing the Holocene.

Urbanism in a way exerts the idea of a symbiotic relationship but, also that of abuse and seduction. Urbanisation disconnects people from nature and wilderness in that it encourages manipulation and change of the natural. The urban landscape becomes a complicated mosaic of uses, ignoring all natural boundaries or ecotones as put forward by Odum. "Human activities both transcend habitat boundaries and differ between patches of the same habitat"
We create a composite landscape lacking in resilience and continuity. However, this landscape also allows us to study the dynamics of ecosystems in that they can patch their connections to surroundings, much like the river remembering where its bed had been. There is a perception of systems in how an ecosystem or a city survives, “it is not the form itself that is sustainable or not, but the processes that create and are in turn shaped by the form.”

In *Resilience thinking: sustaining ecosystems and people in a changing world*, Walker and Salt discuss the resilience alliance, as a group who are actively exploring ways in which to create a more resilient world. They look first at explaining a number of items which we may use to create resilience and how this may be carried out in a number of case studies, in that the “human species are living beyond its means on a planet with finite resources and demand is out of balance with supply.” “We are using nature more rapidly than it can regenerate,” so therefore we require the thinking as explained to deal with changes. Walker and Salt look at thresholds and system dynamics, being the behavioural change and the adaptive cycles of systems in nature. “Resilience as the distance to a threshold” is described, with the threshold being the point of behavioural change or failure in a habitat.

*Reclaiming wilderness*, refers to a notion of the wilderness as that which reclaims man made interferences on its lands, which have gone partially or fully into dereliction. However, following this title I then began to question the word wilderness, being something which doesn’t exist and perhaps never existed but, as something wild which crawls softly creeping on the land. A system which lurks; looking for things to reclaim. Wilderness as a term can be linked to an ecological sublime. Christopher Hitt writes that it is “the contemporary inclination to idealize wild nature.” Hitt analyses “Habits of thinking from this complex cultural construction called wilderness” and if it is just a construction, then all the better, then perhaps it’s not the wilderness that reclaims but an architecture which has an inclination to be something of a wilderness. As Hitt continues:

“the false hope of an escape from responsibility, the illusion that we can somehow wipe clean the slate of our past and return to the tabula rasa that supposedly existed before we began to leave...
our marks on the world. The dream of an unworked natural landscape is very much the fantasy of people who had never themselves had to work the land to make a living. 

The implication of wilderness is somewhat of a naivety and by using this word a great misunderstanding is born however, could it also be used to describe a system of healing, which reverts to the memory of the past again looking to the ecological memory or residue. Wilderness is the notion of an otherness, of nature in kind, of that separation of humans from non-humans. There needs to be a certain level of respect of humans to that non-human nature of which they did not create. We need to adopt humility and to accept the “big foot” approach that I talked of before.

“It seems extremely unlikely that a man-made garden could ever be capable of inspiring the sense of wonder, awe and otherness that an old growth forest could.”

We have however a somewhat obsessive control over nature and what we perceive as just that, nature “humility is thus transformed into self-apothesis, validating the individual’s dominion over the non-human world.” If we adopt the notion of the sublime then we enter a kind of Noösphere where we see the world and respect it in a new light.

“An idyll that falls drinks there and sips in the same drop a beauty that waters its eyes and a death that fledges and flies. The petals of tulips are flaps of the same doomed water that swells and hatches in the ichneumon’s gut.”

In *We have never been modern* the relationship of nature and culture is explored with an emphasis on hybrids between the poles.

“By seeking to reorient man’s exploitation of man toward an exploitation of nature by man, capitalism magnified both beyond measure. The repressed returns with a vengeance; the multitudes that were supposed to be saved from death fall back into poverty by the hundreds of millions, nature, over which we were supposed to gain absolute mastery, dominates use in an equally global fashion. It is a strange dialectic that turns slave into man’s owner and master, and that suddenly informs us that we have invented ecocides as well as...
large scale famine.”

This view as something of a more exploited nature in direct relationship to capitalism is something which Latour discusses. Latour is fascinated by the notion of nature as something which if it “is not made by or for human beings, then it remains foreign, forever remote and hostile”. Latour seems to be intimidated by the hybrids between human and non-human, with this he struggles, “Where are we to classify the ozone hole story, or global warming or deforestation? Where are we to put these hybrids? Are they human because they are our work. Are they natural? Natural because they are not our doing”. Thus we come to the dialectic of nature and society and Latour feels that we have a need for some form of mediator. I guess again something that can make a symbiosis within this relationship something “independent of nature and society alike”.

Silent spring is a truly evocative piece of work, beautifully composed by Rachel Carson, where she describes the chemical fiasco of the nineteen sixties particularly in America and the affect of such on our habitats. Carson talks of the silence in habitats and this silence as poignant, a silence caused by a death of predators of which human kind is the greatest predator.

“We may find ourselves one day, one day soon, maybe-in a world that will only be a desert full of plastic, concrete and electronic robots. In that world there will be no more ‘nature’, in that world man and a few domestic animals will be the only living creations. And yet, man cannot live without some measure of contact with nature. It is essential to his happiness”.

People are themselves responsible for this silence according to Carson, “No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves.” We try to rush nature, we use its resources and are surprised when natural disasters occur. We should stop and recognise “the deliberate pace of nature”. Carson discusses the soil, the water and the green mantle of plants, and their respective abuse and importance to the sustenance of our own lives. “The soil community, then consists of a web of interwoven lives, each in some way related to the others, the living creatures depending on the soil, but the soil in turn a vital element of the earth only so long as the community within it flourishes”, so hence she is telling us of the importance of the relationship
We cannot understand nature and its processes and that we are part of this. This is the inherent problem for us. Wilderness may then be undoubtedly beyond our reach as something incomprehensible, but what if architecture can become wilderness, a system that repairs itself and grows. Architecture could then make nature into something more fathomable which we begin to understand and see our place within. Wilderness could be seen as a tool for making new, fascinating spaces in symbiosis with their sites. Nature is often observed as permanence in relation to that transience of human life. We need to rethink how we design and build and what implications it has on the biosphere of which we are mere caretakers.

“We fancy that the situation can be controlled by the very thing that caused it to spiral out of control in the first place”
17. The return of nature “to demystify the ecological and the sustainable is to reveal the possibility of architecture” as cited in: Ecological Urbanism Mostafavi,M.B.G.Doherty (eds.). Baden, Switzerland: Harvard University & Lars Muller Publishers. Pg137
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38. The geography of mother nature- Peter Fuller as cited in : The Iconography of landscape pg 29
42. Design With Nature: Ian McHarg, The Plan, pg24
43. Design With Nature: Ian McHarg, The Cast and the Capsule, pg 51
44. Design With Nature: Ian McHarg, The Cast and the Capsule, pg52
45. Design With Nature: Ian McHarg, The Cast and the Capsule, pg53
46. Design With Nature: Ian McHarg, The World is a Capsule pg59
47. Design With Nature: Ian McHarg, The Cast and the Capsule, pg100
49. Design With Nature: Ian McHarg, Panarchy, pg197
50. Design With Nature: Ian McHarg, Prospect, pg96
51. Design With Nature: Ian McHarg, Panarchy, pg197
52. Fundamentals of Ecology: Eugenie Odum, Basic ecological principles and concepts, pg 28
53. Fundamentals of Ecology: Eugenie Odum, Principles and concepts pertaining to organisation at community-level, pg57
54. Fundamentals of Ecology: Eugenie Odum, Principles and concepts pertaining to organisation at community-level, pg18
55. Fundamentals of Ecology: Eugenie Odum, pg432
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on the far west of the site in the quarry reed beds would be constructed to its edge. And dovecotes added to create a sanctuary habitat for wildlife.
in its entirety the design aims to create a better reality in this place and to reclaim the wilderness of that existing to set up a framework for a new place of living and a new way of creating living architecture.
my final project arrived at a design which negotiated between the site and that of a new topography on the ground. buildings were set up as framework for both nature and inhabitation, a framework to be walked on and one which would both allow and foster growth within it.

Overall Final Presentation

Timber sectional model through site | scale 1:200
Map of Ireland showing geographical location site in relation to Limerick city. Map of Shannon Estuary with projected future structures. The project acts as a critique of those places where we ordinarily wouldn’t or couldn’t live or inhabit: to site something in a place which seems natural but that is created from a number of unnatural processes. It acts as a framework for nature and would allow for the eventual reclamation of wilderness on the site, thus giving it back to nature.
DRAWINGS OF PROCESS OF SITES ANATOMICAL CREATION
Plan of building at disused quarry & sketch planning | scale 1:500

Photos of site model details | scale 1:1000
Plan of building on water & sketch planning | scale 1:500
Photos of Site model details | scale 1:1000
People live there, people live in the land and on the land, they harvest and learn from the land on which they dwell — it’s a warm protective place, but also a place where one can get in direct contact with nature in a number of different ways.

I arrive by boat to a timber plinth — a threshold from water to land, it is wet the timber glistens from the fresh rain on its surface. I hear the wind rustling through the bed of rushes which protect the edge of the water, and trees planted like a collinade protect me from the wind.

I walk inside a skin like blanket, I feel as if a coat has been draped on my shoulders, I see the sky dappled but also feel safe as if within. I can hear the rain fall on the surface above, I can see a topography ahead of me, undulating from the surface of the earth. I walk along I discover some places within the land, their thresholds are barely legible, distorted by the wilderness entering inside. I follow a path created by the shaping within the land. I find a place sunken in which I can sleep — an narrative of the place.
is small, perfectly proportioned to my bed. I feel as if I'm within a blanket, inhabiting the skin of the building. I can smell trees, I feel safe. The smell of food wafts by my face. I awaken and meander through the enclosure. The food comes from the gardens. We harvest it and we process that which needs it on the outer shell of the building. We sell some of the food, some of us research its attributes and work on developing new crops which may be planted here. We only eat that which we have on site; we smell the produce, we see it grow, we work with it and it becomes part of us and part of the enclosure. The enclosure is somewhat blurred; the growth enters inside and we penetrate the shell to move outside. We become part of the growth and that becomes part of us. I move along hedgerows and walk to the edge of the water. I use a wooden jug to take water from the lake to use for washing the food. I walk through a number of thresholds to bring the water to the market side. I spill some now. I look down the water is rolling along the timber and then disappears down through the thresholds between the spaces.
sliding over the edge and dripping through to the reed bed below.

Children play along the water and watch as their parents collect it for farming; they grow up respecting and understanding its potential and value. They learn in some of the enclosures, learning is linked to libraries with information held in books but more importantly to physical attributes, the water, the soil, the presence of manmade things, the scarred edge of the quarry. They learn by smell, taste, touch, sight and sound. They learn in relation to those who research and produce. They are nurtured by the land within the enclosure and therefore respect and nurture it.
then once again leave, having not
affected what is there. It is as
if the site opens its pores and allows
inhabitation within them, only for
awhile.

The buildings or skins act only as a
filter to the site, to allow those
who live there whether permanently
or in a transitory manner to inhabit
the topography as shaped by them.
to sit within the layers of skin and
to create a new reality on the site
that of a fourth landscape, that of
a natural unnatural, a framework
for life of people and finally for
reclamation of wilderness.

TIMBER DEVELOPMENT IDEA SKETCHES

PHOTOS OF DETAIL MODEL | SCALE 1:20
section through building at quarry | scale 1:500

section through building at waters edge | scale 1:500

Perspective of entire proposal on site | NTS
Photos of sectional model through site | Scale 1:200

Photos of sketch building model | Scale 1:1000
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All images Authors own

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Photograph of concept model looking at shelter and ways to create such in a skin like manner.

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Drawings as created to depict site location.

Images on pages 13-18
Photographs of models and drawings of work from the first semester from a collation of primer projects.

Images on Pages 19-36
Photographs of models and drawings leading to the design of the final thesis project.

External cover image
Sketch site plan of proposal in work at time of print.

Final thesis project
drawings and photos of models
(Titles as per individual labelling)
All have been scaled to fit into this document

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