The Edgeland of Edge Cities:

Re-structuring the void.

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Acknowledgements

I would like to take this opportunity to say a special thanks, first and foremost, to my parents, Tony and Bar, my brother Gareth and my sister Emma whose constant enthusiasm, patience, positivity and motivation has been essential during my thesis year. I would like to acknowledge my dad in particular for taking the time to meticulously edit my thesis writing throughout the year.

I would like to thank my dear friends in SAUL who have always been there for me, to listen and advise on matters architectural and otherwise. Those long and strenuous days would have been a lot harder to endure without their positive energy and sense of humor.

I would like to thank my mentors Merritt Bucholz, Andrew Griffin and Anna Ryan for all of their advice, guidance and inspiration throughout the year. I would also like to thank Tom Moylan and Grainne Hasset for their advice, encouragement and direction when I sought out their help.

Finally, I would like to say a huge thank you to Jane Kissane, Alex Griffin, Fiona McLernon, Aidan O’Dea, Clodagh Ryan and Steven O’Carroll for helping me in the final days. I would not have reached the finish line without each and everyone one of you.
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Moments of disorientation are something I relish. That instant when you know nothing about your surroundings. I look at these moments as a challenge, a test of my spatial awareness and navigational skills. I would describe myself as one of those people who refuses to ask for help when negotiating my way around a new city. This is not because I am too proud to admit when I am lost but because I enjoy finding my way back. That feeling of heightened awareness when one is looking for even the smallest fraction of something that is familiar. This is one of the many reasons why I love to travel.

Over the past few years I have travelled to 4 continents, exploring different cultures and architecture. Regardless of where I am in the world, every time I travel to a new place I always find myself doing the same thing upon arrival. I stand still and imagine where I am in the city. I find myself drawing up a mental map that I fill with all the details I already know about the city and as I am walking down the street I am constantly adding to this map. I am aware that I am doing this but I do not know how or why I obtain certain information and not other details. This makes my mental map invariably incomplete and partially distorted, but yet I can find my way around the city with reasonable ease.
"The Image of the City" by Kevin Lynch really enhanced my interest and my understanding of orientation and how it is achieved. Lynch introduced a new way to think about the form of a city. He studied how people perceive and understand their city by identifying features in the built environment. His five-year long research project resulted in Lynch theorizing five key elements that make up an individual’s perception of their city. They are as follows:

- Paths,
- Nodes,
- Landmarks,
- Districts, and
- Edges.

This theory changed the way I perceived the idea of orientation. I began to understand why my mental map observed certain features in the built environment. Most cities in the world are unique but they all possess one or more of the key elements that Lynch described. One may become disorientated and unable to fully read a city or a space due to lack of cultural references. A European tourist, for example, visiting a medina in Morocco would be unable to differentiate public/private/other spaces. However, being able to identify paths, edges or landmarks would improve ones direction in a disorientating city/space.

I wanted to examine Lynch’s research outcomes so I asked some of my peers to draw memory maps of Limerick City, drawing only Lynch’s five elements, using a specific legend. As you can see the maps vary quite a bit, but the one definite constant is the river and its connection to the city grid. I asked each individual how they orientated themselves when drawing their maps, all of them informed me that they began by drawing the outline of the river first. I concluded that the element ‘Edges’ was the most pivotal in my test cases.

I began to look at how architects and planners have used these elements throughout history and discovered that some have been very successful in generating strong spatial connections between these components, creating a great sense of architectural richness as one travels through the space.
Perspective and framing viewpoints

The Roman Obelisks

In this case, the planner utilized paths, nodes and landmarks in his design of the city of Rome to make it more legible to visitors of the city.

Classical Rome was a collection of monumental architectural structures scattered about an open, undefined landscape that did not consider spatial relationships or circulation issues. In 1585, Pope Sixtus V redesigned the city using the art of perspective. He organized the entire city around several key points in space that relate to each other over the expanse of the city. His main objective was to create a link between seven pilgrimage sites within the city. This fete was achieved by creating straight streets and avenues that established tunnels of vision. To generate a tunnel of vision he needed a horizon point, for this he used the pagan marker, the obelisk. It was not the churches themselves that would orientate the pilgrims, but rather the obelisks would begin a process of perception. The assembly of monoliths created a pilgrimage by using the eye of the pilgrim to lead him or her from marker to marker rather than to the inside of the pilgrimage site. The moment one arrives at one obelisk, another one comes into view and draws one down another tunnel of vision and the process continues.

Stourhead, ‘A Living Work of Art’

Stourhead is an English Estate famous for its garden that was designed by Henry Hoare II. It was an icon at the forefront of the 18th Century English landscape movement. This space employs paths and carefully positions landmarks in its meticulous design. The garden consists of an artificial lake with a pathway around it linking the intentionally placed monuments. The design was inspired by Greek mythology, in particular, the journey of Aeneas and his descent to the Underworld. The garden is comprised of a series of carefully constructed views that entice visitors from one monument to another. The planting is arranged to evoke different moods, drawing the visitors through realms of thought. It is a secluded world with glimpses of the wider landscape. The garden is a journey of framed viewpoints, not unlike Pope Sixtus’ Rome.

Thought experiment

I continued my study by looking at several city plans from around the world and came to the conclusion that all cities have one thing in common, they all have an edge. Whether it is a coastline, river or a city wall, each city ends at a certain point. The edge of a city is important. It defines the city while also holding it together. This led to my concept of an edgeless city:

Imagine if the separation of the continents reversed and once again a singular continent formed. All of the world’s cities would merge, gravity pulling them together. The landscape would shift significantly and cityscapes would become engulfed in forests while high-rise apartment blocks and suburban housing estates would consume other woodlands. The cities would become a hybrid supercity.
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Each city, now a mere district in the supercity would begin to compete with each other for existence. Each would strive to be the greatest. Like the exotic plants on the bed of the Amazon Rainforest that weave and crawl their way viciously upward by any means possible to get even a ray of sunlight or a drop of water, these cities would be determined to fight for survival. They would disregard their sister cities and see them only as rivals.

However, as each city rapidly began to run out of resources there would be the realization that each could not survive alone. To prosper as a supercity they would need to unite. Their streets would become intertwined and their borders would dissolve. The cities that united would reign supreme. The former city peripheries would fuse with the neighboring city and new nuclei would immerse. People would flock to these new sub cities. This migration would occur at all the boundaries and soon the edges of the old cities would become the new centres. This would shift the dynamic of each city and soon what was once the thriving hub of each great city would become the black hole of the districts. Vast parts of each district would fall to ruin, abandoned for the blossoming fused cities. The inner cities would decay in the absence of people. How would we deal with this change in our environment? What would be our solution for this problem?
This concept of an edgeless city shifted my interest from the city itself to its boundaries. I began asking myself questions such as:

- Is the edge of a city a line or a space?
- Is it a threshold we cross or a space that we can inhabit?
It is easy to identify the edge of a city when it has a definite edge such as a walled city, but how do we define cities with no definite edge. City boundaries can be unclear, they transition from commercial blocks to residential estates and the line between urban and suburban disappears. The architecture of an urban space is somewhat different to that of the suburbs but have we created a style of architecture for the transition space? “Edgelands are those areas that are like a threshold between the two worlds, carrying aspects of both, but representing neither – they are a third type of environment overlooked by most people.”

To some the Edgelands are simply views one sees from one’s car window as one whizzes by, barely observing what is actually there. To others, the Edgelands are a place of mundane, yet unique beauty. “It touches us personally, we all walk through similarly neglected landscapes in our own lives: ordinary places that become extraordinary when we stop to look and rethink the familiar things we take for granted.” Artists like George Shaw have tried to capture this beauty in such works as ‘12 Short Walks’. These paintings evoke a sense of awakening in these otherwise disused and disheveled spaces. It is clear that areas of Edgelands have emerged and are beginning to develop their own characteristics. It is clear that they have a place in our landscape between urban and suburban but can we, as architects, design a style of architecture that will enhance these areas but still keep their transitional and edge like characteristics intact? I believe the answer lies somewhere between creating a new node in the Edgeland but also creating a space that connects the urban and suburban fabrics.
Geometric Order and Chaos

Orientation and disorientation can be achieved by geometric order or the lack thereof. Since the beginning of human history, the presence of geometric order and chaos has existed in architecture. For quality and richness in an architectural space a balance between order and chaos is essential.

Ideal forms and ideal relationships represent geometric order. It evokes in the observer a feeling of classical beauty and harmony. Chaos is the interference of geometric order. Complex and chaotic structures create an individual atmosphere and peculiar beauty. It gives architectural space an individual dimension.

Mies Van Der Rohe’s attitude towards the subject is that ‘Less is more’ favouring geometric forms over more complex forms. While Robert Venturi disputes this with the idea ‘Less is a bore’ as he prefers complexity in place of monotonous and boring spatial simplicity. Finding a balance between order and chaos is necessary in architectural design. When does order become boring and chaos become uncomfortable?

Geometric order is formed by controlled planning or designed process. Chaos can be created by the natural transformation in our environment. Understanding the relationship between order and chaos has been instrumental in my thesis study. I now understand this relationship can be used as an architectural tool in the design of a space. This balance can determine orientation and disorientation in a building, city or landscape.
The aim of my work is to examine orientation as a dimension of architecture’s spatiality. How do we negotiate a space? How do we define a space? I am working on a scheme based at the edges of Limerick City between urban, suburban and rural. I am observing how we define this space: physically, geographically and sociologically. I believe there is a gap of undefined land in our landscape. I propose for the Edgelands to be the beginning of a new architectural space. In the words of Steven Holl, I propose to “transform the tangled waste at the fringes of our modern cities and build new urban spaces with spatial and architectural richness”. 
I begin by discussing Limerick in the present day, focusing particularly on the outskirts of the city. I have divided the first essay into an abstract, introduction and process. The introduction briefly looks at the history of Limerick's urban sprawl and economic expansion. I then talk about the recession and its effect on Limerick. In the process I discuss my perception of Limerick both physically and sociologically.

The Beginning
Upon its establishment, Limerick City was confined to King’s Island, the Englishtown. It is hard to believe that what we now know as the centre of the city was once outside of the city walls. As we look at the growth and expansion of Limerick we see how the New Town took over and gradually moved the markets from the Englishtown to the Irishtown. Would we still define the Georgian Core as the centre of Limerick City? The development of Limerick City has taken the form of an outward sprawl from the city centre. Limerick has experienced a surge in suburbanization and as a result has seen a fall in urbanization. People began craving a bigger house and more space so they moved their habitation out of the area traditionally considered as the city.

The ripple effect from this suburbanization is important to discuss. People now living in the suburbs realized they were missing the necessities of city life so they moved the marketplaces out to the suburbs where they lived. With this shift in population developers and retailers took this opportunity to set up outlets on the fringes of the city with cheap rent, large retail units and in close proximity to the expanding suburbs. When this movement first materialized retailers flourished with enough footfall in both the city and the outskirts to maintain multiple chains of their business. These commercial outlets emerged dotted around the peripheries of Limerick City. With them came an area of commercial zone. Large areas were bought up to fill the demand for retail space. However, people wanted to be in close proximity to their retail stores but not live in this retail zone. This left a gap between cityscape, retail outlets and residential suburbs. Initially, this gap was barely noticeable. It was constantly being filled with cars and people consuming more then they could afford.

Then came the economic recession, retailers had to make a choice when it came to downsizing and most chose to cease trading in the city centre. This decision was based on the majority of people living and shopping in the suburbs and with the car culture in this country, the idea of free parking in these outlets was more appealing than the traffic, parking issues and congestion of the city. Actions such as these led to an increased decline in the city centre. But that was not all. Those who were in the process of setting up their businesses in these outlets pulled out of developments that had already begun. This gap between urban and suburban suddenly became a lot more obvious. These areas of closed down warehouses, retail outlets and partially built structures became even less desirable for residences and the suburbs quickly pulled their ties with these once convenient commercial centres. In some cases, these retail malls were constructed in the centre of new suburbs and managed to survive with the residential area expanding around it. These cores have succeeded in becoming an essential part of their community. With these changes in the economy, Limerick City became a ‘doughnut city’, with a hallow core in a state of decline, surrounded by flourishing suburban areas that have now dwarfed the city centre.
I believe that there are two ways we can describe Limerick City in its present form. It is a small Georgian City that holds a strong grid form that quickly becomes diluted at its fringes by organic patterned streets that lead to residential and industrial areas with no ties to the Georgian grid. These unsystematic streets then lead to the semi-suburban areas and eventually to the ever-expanding suburbs that dwarf the city.

The alternative way that one could describe the city would be as the Georgian City among a megalopolis of Edge Cities. I think that the suburbs of Limerick could be described as edge cities because they contain all the functions of a city but are spread out in a different form so few would recognize them for what they are. Just like traditional cities they are self-contained entities. Now, we can look at Limerick’s Georgian Core as one metropolis in this constellation of cities sharing one urban fabric. If we were to look at the Limerick City region as a cluster of cities, we would have to look at it both sociologically and physically. Sociologically the cities are self-contained entities. The city inhabitants, even nowadays, rarely leave their city and if they do it is for a reasonably short period of time. City-dwellers create their livelihood from what their city has to offer. Therefore even though the cities’ boundaries may touch, sociologically the community in each city would be different and separate. The citizens would focus inwardly to their respective city. Physically the cities are centrifugal with dense centres that thin out towards the edges. They are tangential cities of shared urban fabric, which often overlap, while in other places they barely touch. As each city developed and expanded all cities would eventually come in contact with a neighboring city. What would happen in these spaces? What happens in the Edgelands?
Thesis Intent
Something about these Edgelands entices me. It is a place where architecture meets anarchy. What is the architecture of our Edgelands? I would like to focus my thesis on this question. These spaces leave gaps in our society and in our landscape. The edges of urban, suburban and rural territories are blurred. We cannot fully define where one stops and the other begins. I would propose to create a zone between the urban and suburban territories. I would like to create a transition space, an unplanned journey through a new semi-urban landscape. The journey would be directed by the aesthetic contours of the surrounding architecture, which would subconsciously direct the travellers through this space. The idea would be to design an authentic spatial experience and to derail from one’s usual course of nature and convectional means of engaging with the city.

The site I have chosen to the study is the Groody Valley. It is a site, which is neighbored by commercial outlets to the West, industrial parks to the South, residential estates to the East and the River Shannon and the edge of the University of Limerick Campus to the North. This site is connected to so many different areas of functions as well as styles of architecture; it appears to be a very suitable site for my thesis studies.
A Dystopian Limerick

To imagine a Utopian version of this site, I find it helps to firstly imagine it at its worst. The problems that I have discussed about Limerick City and its surroundings will only get worse if they are not addressed. I began by writing a dystopian outcome for this site to highlight the current difficulties if they are not faced in the near future. By creating a dystopian version I am subconsciously pointing out all the faults I find in the space by describing them in this essay. From there, I can address these problems once I have imagined this worst-case scenario outcome.

In this essay I wanted to look at a dystopian version of Limerick in the future. It is an essay that refers to the problems in Limerick that I have outlined above. It is a radical proposal of what might happen the city region over the next fifty years.

The Valley of Dust... more like the valley of rust and today on my 70th birthday, 2064, it infuriates me as much as ever to look out at this wasteland. This is the unpleasant view from my bedroom window, which overlooks it. Desolate plains that stretch out almost to the horizon. What stands between these barren wastelands, and the horizon, is the Georgian City. The Valley of Dust appears dried up with scorched earth, apparently unusable for anything. These lands had been tried and tested for everything, perhaps too much at this stage. They were formally farmlands used for crops and animals, with fertile land just beyond the borders of Georgian City. As the people began moving from Georgian City to Castletroy maybe 100 years ago the lands were never occupied and subsequently became 'edgelands' of both cities. Developers as they were once called, took an opportunity to build on the land with huge shopping centres, restaurants and hotels. This was in the age of greed, the 'Celtic Tiger age' they called it. As Georgian City and Castletroy began to develop within their individual city limits, this area between began to decay.

Georgian City can be seen on the dusty horizon, just one of our many sister cities and the second oldest. We rarely leave our city now to go to the others why would we? We have everything here. We have schools, restaurants, factories and a hospital. It’s not that I don’t like the people from the other cities, its just I don’t like traveling beyond our city perimeter, maybe its my age but it makes me so infuriated. Today however is one of those rare days when I must travel out. My sister and I must take the city link transporter through the Valley of Dust to Georgian city.

We descend the hill, where we live, down past rows of colourful houses and laughing children. Our avenue is a happy one. We are all one big family in this community. All the adults work in our
factories; schools or hospital and all the children play cheerfully in the streets. From the street, you cannot see the Valley of Dust... maybe that is why everyone is always so joyful. We come to the foot of the hill and cross the walkway to the Transporter Stop. This was once the main road into Georgian City but no one has cars anymore, everyone lives within walking or cycling distance to school or work so there is no need for them.

There were only two other people at the Transporter Stop when we arrived... no one really travels between cities anymore therefore few use the City Link. When the trans arrived, I resentfully followed my sister on and while she swiped our link cards I took a seat. Surprise, surprise, we had our choice of the lot! I turned around to see if the other two people at the trans stop were getting on, but they remained motionless. When she sat down I quizzed her about their reasoning for not getting on the trans, she silenced me mumbling something about a trans to Dublin that comes by this trans stop. My sister knew how frustrated I get when I have to travel between the cities so her patience was wearing thin before we even left. She was relieved that it was Georgian city that we were traveling to and not Reheen. The way to Reheen is on another trans that takes one through a long narrow valley that spans all the way from Castletroy to Reheen. The people long ago put explosives in the ground to create these long sunken tunnels to use as transport ways, they were called motorways back then. Now, these are ghost ways with nothing but the odd trans traveling through them. But that journey is for another day; today is just a quick trip into Georgian City. The trans moved quickly downhill until we paused briefly at the City Controls Checkpoint. An officer stared at me through his sunglasses and smiled when he was convinced that we were not ‘Edgelanders’. The trans bounced along the paving for a few more metres until we came to the city boundaries where we were lifted about a metre from the ground and began floating along into the Valley of Dust.

The Valley of Dust earned its name after developments ceased in the area and the outlets closed down. The Edgelanders began demolishing the buildings and roads to use for their own purposes. Once the buildings were knocked and the roads were dismantled and all usable materials were taken, a thick cloud of dust remained hanging in the air from the debris. From Castletroy it appeared as if the valley was engulfed in a cloud, it was at this point that people began to refer to the uninhabited area with that name. I, however, prefer the name Valley of Rust. When all of the concrete and building frames remained, slowly the steel began to rust, fracture and decay and was of no use to anyone. Nobody cared about the valley anymore so the decaying steel remained. Now, the dust has settled and all that remains are the red skeletal shapes standing alone, swaying in the wind. They are the only remnants that this, once thriving commercial region, even existed. I think the Valley of Rust is more suited, don’t you?

Incase you are wondering, the Edgelanders, as I call them, are the people who remain in the fringes of the cities between Castletroy and Georgian City. They built their houses in the semi-suburbs of the Georgian City; just as all the other Edge Cities were emerging, this place simply could not let go of the city like a magnet, attached but not a part. Instead of breaking away like the others, they held on to the Georgian City. At first Georgian City used them as an extension of their city but then cut them off entirely. These inhabitants were stuck with nowhere to go. In their panic over the years they stole all the materials from the surrounding now decaying buildings and roads. Some of the people begged to be allowed into Georgian City but their city limits were shut. Others tried to sneak in using the City Link Transporter, however ‘border guards’ check the trans. Then they were left isolated from the cities with raw materials they had no idea what to do with. With time they accepted defeat and began to build their own city. We call them Edgelanders; it makes them sound like a tribe with their own land and freedom as in ancient times. Edgelanders, better than having no name and being forgotten by all.

I sometimes feel sorry for them. They didn’t choose this isolation or lack of belonging; they were cast aside by their own city. I always feel sad when I pass through this community, on the secure trans, with its old worn down dwellings, surrounded by piles of concrete and timber and of course rust. At one side of the road I can see a steel framed structure. It is partially hidden by old graffiti stained walls and overgrown trees. Is the structure being assembled or dismantled, an outsider would never know? On the other side of the road I see piles and piles of materials that look like landfill which cover most of the ground in this community. The houses are much like ours but sadder in some way. Some of the windows are cracked or broken while others are completely boarded up. At least that’s one use for the resources in the landfills. The houses look abandoned to the naked eye; it is only by looking closely that you will see evidence of habitation. It is the lonely flowerpots, willing the freshly planted flowers inside to bloom colourfully amidst the grey surrounding of decay that gives a clue. Another clue, the fresh chalk-drawn hopscotch scribbled on the decayed driveways, long unused...
and slowly being worn away by the constant breeze with its
grey dust. It is the rare sound of a people talking or a child
laughing that confirms. Colour is in short supply in the
edgeland of Rhebogue.

If you were to ask me what I think the worst thing about Rhebogue is, I would just point
forward and bid you to look. Between the thick black
overhead wires, the decay and smoke puffing chimneys you
can see the outline of the Georgian City skyline beyond. It
stands there, tall and proud, looking down on this forgotten
land. It taunts one with its superiority, I hate that about
Georgian City.

Going through Rhebogue the
closer you get to Georgian City the more it looks like a war
zone, the ground covered in a layer of rubble. The houses
here didn’t stand a chance. They were blasted with
explosives until no structure remained. The Fields of
Nothing marked a definite boundary between Georgian City
and the Community of the Edgelanders. The land here was
different to the Valley of Dust. There, the steel frames could
be interpreted as buildings unfinished or paused, frozen in
time. Here, the buildings clearly met a violent end. No shape
or frame could be viewed from the debris. All remnants lost!
With each chug of the trans we came closer to Georgian City.
The towering skyline engulfed us in shadows just as we
reached the City Control Checkpoint. Our checkpoint simply
consisted of fences and barbed wire as a defense along with
a handful of gun wielding ‘border guards’. Georgian City is a
fortress, guarded by high walls made from the surrounding
wreckage. Large thick walls created from the crumbling
debris. The trans slowly passed through the wall. I could
hear a low humming sound that signified that the laser
scanners were working.

Once we came through the
border archway, through the dark depths of the wall, the
contrast was unimaginable. Like waking up from a dark
sleep I had to readjust my eye to the abundance of colour.
Even the sky looked bluer on this side of the wall! All the
brick buildings were a shade of deep red or polished grey
concrete. The walkways were impeccably clean with people,
ambling or cycling past in every direction. Everything
appeared clinically clean, even the glass casing over the
river. The river flowed from Castletroy but passed through
the Valley of Dust, the Community of Rhebogue and the
Fields of Nothing, therefore the people of Georgian City
deemed it unsafe and shied from direct contact. Where they
could, they covered it over with thick glass plates and where
the river grew too wide they simply build high glass walls to
block any breeze or spray blowing off the river.

At the corner of Main Street we
‘hopped’ off the trans and to no one’s surprise there wasn’t
a single person waiting at the trans stop to get back on. We
made our way down Main Street past flamboyant flags and
decorations. The city always looked like it had purpose, like
there was a festival happening. People were walking,
chatting cheerfully, gossiping and swapping stories. I kept
stumbling over my shoes, constantly distracted by the views
of everyday life, shop advertising, by colour, by the shops.
One particular clothing shop had holograms of ballerinas
prancing above our heads showing off their latest lines,
another had mannequins threading the display window
wearing holographic outfits that changed every few
minutes. Nothing was static about this city, everything and
everyone was constantly moving enthusiastically, full of
colour and life.

We finally turned left off Main
Street and made our way swiftly to my cousin’s house. She
lived in a tall narrow red brick house with long narrow
shiny windows. Her house faced out onto a picturesque
park, lined with leafy trees. Once I embraced her with a
quick hello and a peck on the cheek, I scurried out the back
door before anyone could object. I headed straight for the
little house at the end of the garden where I knew my
younger cousin would be. I swung open the door just as she
was drifting off to sleep while watching a documentary on
‘Bacteria in Water’ on their 3DIPS (three-dimensional
interactive projection system). I quietly sat down beside her
on their circular couch around the projector and watched it
intently until she woke. When she finally woke, we chatted
in depth about their latest troubles with the edgelanders
and the news we had from our respective cities.

A few hours later my cousin
shouted through the intercom that we might return to the
house. By the time we walked up the garden path she had
already begun to run the security system. As we closed the
back door behind us a metal shutter emerged and sealed the
door from the outside. Suddenly, a wave of disappointed
rushed over me, I should have looked around more while I
had the chance, now I was stuck inside until tomorrow, I
thought irritably as the metal plates that now entirely
sealed the house shut out the last bit of flowering green.
Hopefully, the Edgelanders wouldn’t attack tonight; I really
wanted to walk in the park . . .
ANALYSIS:

Introduction to site
Bringing these ideas back to Limerick, I was immediately drawn to the edges of the city grid. It is at this point where order and chaos meet. The urban grid meets rural field patterns. I became fascinated by the edgelands. Site has been imperative to my project. It is where the urban fabric meets rural landscape. My intention has always been to try and link the city and the University by using this site. The site has a very low functionality and therefore has very low human value. However, the site has great potential. The site is an uncontrolled flood plain that is situated on the outer side of a large U bend on the River Shannon. It is a scattered, undefined landscape, not unlike Rome prior to Pope Sixtus V.

The site can be described as a transitional space. There is a constant flow - a flow of water, people and cars. Although the site has been fossilized in terms of use, there is no shortage of people transitioning through it. The problem is that no one stops. No one observes. The traveller easily forgets the site as nothing in this site holds ones attention. In this sense, it is a gap in the landscape.

The main distinguishing feature of the site is the road that cuts through it. The Dublin road was the main connection between Limerick and Dublin before the motorway. It also links the city and the University. When travelling across this road the traveller can barely observe the site with the ten-story hotel on the north side of the road, the skeleton of an undeveloped shopping centre on south side and two hectic petrol stations that sit across from each other further along. Beyond the grounds of these establishments, the site is motionless. The rest of the site is isolated and inaccessible. The only movement is the little Groody river, racing towards the great Shannon, carrying with it pollutants it has collected from the drainage ditches as it passes through the site. The undeveloped shopping centre on the site is part of the commercial developments I mentioned earlier. The partially built mall was supposed to be the second biggest shopping centre in Ireland but ran out of funding in 2008 so construction came to an abrupt halt. For the past seven years, the site has remained untouched by everything but the elements. Over time the thick concrete cores have been weather beaten and eroded while the steel frames have corroded beyond use. The project now exists only as a monument, a reminder of our greedy past. A major issue with the overall site is the uncontrolled flooding that affects the site and its surroundings almost every winter.
Aerial View of the Groody Valley when flooded.
Impact of water on the site

In my site analysis I have been observing the site and its relationship to the water. The Shannon River is located to the north of the site while the Groody River, a small tributary of the Shannon flows through the site, south to north. The site is a flood plain the takes in water when the banks of the Shannon burst. It also takes the storm water from the surrounding area via drainage ditches that have been dug throughout the site. When it floods, the relatively flat site fills up with water and becomes water logged. The water then slowly runs off into the Groody River, which carries it back to the Shannon with run off from the fields and surrounding housing estates. The flooding is problematic to the site as it renders the site as having very little value to the local and regional community. The site has very little function other than to act as a flood plain.
Throughout my thesis studies I have looked to a number of architects for inspiration and ideas. From this collection the most influential have been; Turenscape, Florian Beigel, West 8 and LCC (Land and Civilizations Compositions). In particular, Turenscape’s project in Jinhua City, Zhejiang Province, China has stimulated my thinking. The site in China is a water resilient terrain that deals with monsoon floods. It is designed to adapt to the dynamic water currents and flows of people.

When I chose this site, I was very cautious of how large it is and that in the tenure of my thesis study that it would be impossible to devise a design for its entirety to the same level of detail. In reading and researching Florian Beigel’s Architectural Research Unit, the statement, “design the rug, not the picnic” really inspired my thinking on how to deal with the site and how I could design for the uncertainty of the future.
DESIGN STRATEGIES:

Re-structuring the void.

The aim of my thesis is to reclaim this landscape and create a New Edge; a Moveable Edge, that connects the city to the university and makes the site accessible to the locale. The function and value of the site is low, no one who passes through the site has any connection to it. It is rendered void in people’s minds. By introducing a wetland system to the site would greatly increase both the value and function of the site. Wetlands act like sponges by holding floodwaters and keeping rivers at normal levels. Wetlands filter and purify water through the substrate and wetland plants, removing toxins as water flows through the wetland system.

The functionality of the site would increase, as the site would now act as a constructed wetland. The wetland naturally holds and filters the water, which in turns helps purify the run off to the River Shannon. As the wetland system would be capable of holding and storing more water than the existing site it would also prevent surrounding areas from flooding, especially Limerick City which lies further along the River Shannon. As the function of the site would increase, the human value would also grows. The site would now act as an element protecting the city from flooding. This is just one of the potential roles of the site. This flood prevention system does not have to be limited to the extent of the site. It calls into question the idea of urban drainage systems surrounding the site and how they can make use of this natural filtering process.
Construction Process
A constructed wetland system could be just one layer to the scheme for the site. By finding a solution to the problem of flooding and using that as the basis to the project, the opportunities for the rest of the site are endless. The design strategy would be implemented over an extended period of time because of the expanse of the site so the schemes’ relationship with time is important. The order that is created in the architectural design will slowly roll out on the landscape over time, while the chaos of nature will disrupt the order sporadically. In relation to potential construction on the site, I have imagined the order in which this would be carried out. This would be as follows:

- Define the physical extents of the wetland park using historical flood maps, annual flooding extents and the hundred year flood predictions.
- Create new water bodies, wetlands and a new drainage system to deal with the flood and storm water.
- Manipulate ground level around the water bodies and wetland system to allow other activities on the site.
- Introduce principal routes through the wetland park connecting the city to the University and connecting the surrounding residential estates.
- Identify a number of green fingers to encourage neighbouring communities into the park.
- Propose a number of site-specific interventions and focal points for way finding.
- Protect and enhance existing habitats on the site through the retention and encouragement of their ecosystems.
- Integrate the pathways as part of the water treatment and storage system.
- Integrate a strategy for current and future water management within the framework of a wetland park and surrounding farmland.

New flood extents.
**Proposal:**

“The characteristics of a landscape architecture project is thus to find its source of inspiration in the site itself, in the configuration of the expanse, its thickness, its history, its geography, its uses and modes of occupation, and its plant life.

Once the site is understood as a layered ensemble crossed by various dynamics, we can select an orientation that respects the system in place and attempts to make it more attractive and better adapted to existing and future use: in a word, capable of evolving.”

The site is an undefined landscape with entrances around the peripheries that connect visually but not physically. I will de-partition the site and allow its various strata to interact. They will connect the city and the university. In the transition between these two edge cities, the site will act as the liminal period of the journey. It will remain an interstitial and undecidable place. The project will blend architecture, landscape and circulation into one system using a network of organic paths that aim to reconcile urban planning, landscape, agriculture and the natural environment and will in turn improve land usage while taking advantage of the seasonal fluctuation. The farmlands, wetlands, parklands are all interwoven together.

The aim for this project was to try and accomplish this proposal with minimum infrastructural interference. The main construction effort would be manipulating the ground to create a flood path through the centre of the site along the Groody River with perpendicular slices cut out to absorb the excess flooding and water runoff during heavy rain. This flood corridor is where the moveable edge is created. This is the disappearing landscape. Within this extent the site will deal with the rising and falling flood levels. The architectural has to serve two very different landscape, it has to adapt to the dry and flood seasons. Parts of the parkland will disappear and other parts will come into use.

**Foreground/ Middle ground/Background**

“The first act of any landscape project must be to take into account the specificity of the expanse. It is the first horizon you have seen, which enables you to locate yourself within the space and to understand the interrelations of the place with its immediate and more distant neighborhoods.”

Although the physical extents of the site have a definite edge, the visual relationship the site has to its surroundings is very powerful. Within the boundaries of the site, the visitor is lead by pathways, landmarks and framed viewpoints that guide them as they transition through the site. Beyond the site, certain distinguishable are easily identified from the site and connect the visitor back to the city and the surrounding areas giving them a reference of where they are in relation to that monument. In the design process the materiality of the pathways has been designed with these viewpoints in mind. The changing textures and materials of the paths as you traverse over the site forces the visitor to look down and readjust. This constant change in focus between looking at the ground material, to looking through the framed views on the site to gazing out further to the Clare Hills or St. John’s Cathedral in the city in the background adds another dimension to the project.
1:50 Section through constructed wetlands and pathways.
I set out to explore the architecture of the edge, in particular the edge of the city. My intention was to restructure the void in our urban fabric and reclaim the land from the river and create a shared landscape.

My architectural process can be described as a series of layers assembled on top of each other. I began looking at Limerick and my site in plan as a two-dimensional space. I was searching for order. I intended to manifest a new kind of order. In plan my scheme is an organic pattern of connections, both physically and visually. I began to create new edges and in between spaces. I ordered the spaces and defined them by function. The plan then began to develop a third dimension. I manipulated the ground to create a new flood path. The section advanced the plan by giving a thickness and description to the organic lines. These lines and spaces that were created now had a purpose. The scheme has an order that materialised in the design process. The chaos is introduced in the fourth-dimension; time. “Architectural design describes space with three dimensions, it does not represent the fourth-dimension – time.” This is where the levels of disorientation can fluctuate. The seasonal flooding means that the site will have different characteristics at different times in the year.

Achieving the balance between chaos and order.

My architectural design process has been predisposed to Lynch’s five elements of orientation since I began my thesis study. These acted as guidelines for me during the design stage. I began to look at them as an equation to create an orientated landscape. The five elements together give equal orientation and as you subtract them away you can change the balance towards disorientation. The reasoning of how I employ the elements to find a balance are as follows;

The edge of the site already exists, however, with the introduction of green corridors that stretch into the surrounding residential areas and the new connections made throughout the site mean the edge will blur in certain places and disappear completely elsewhere. The main intention of the scheme is to create paths and nodes that connect and guide one through the site. As the flooding begins, the pathways and nodal points begin to disappear, the landscape is altered and the visitor is redirected to a different route so the footfall on the site also changes.

Landmarks around the site, such as the Clare hills, the Travel Lodge, and the Castletroy Water Tower can always be seen from the site, however, the seasonal change of the site may be enriched by circus and theme parks that reside on the site during alternate times of the year. They will act as a temporary monument or landmark while on the site. My intention is to create an adaptable, ever-changing and undefined landscape that evokes a sensation of misperception as one transitions through it. One may pass the site on a warm September day when the site is filled with activity and excitement from circus goers, cyclists, families having picnics and dog walkers. One may pass through it again only a few months later to find that the river has swallowed up the centre of the site and the circus has left an empty green space in a once vibrant area. The atmosphere of the site has completely changed in a matter of months and will have entirely changed again by springtime. This continuous cycle will occur year after year. I began my writing by stating that moments of disorientation are something that I relish. If I can create that one, single, thought-provoking moment when one has stop and reassess ones surrounding because they do not appear to be the same as before, I have achieved my moment of disorientation. If one can then orientate themselves by the monuments that are framed before them in the landscape and beyond, they have determined order in the chaos. The balance has been found.
1:1000 Contour Model (left) and model with projection of scheme (right)
FOOTNOTES:

1 Ahern, Prof. Jack. 'Landscape Architecture Study Tour.'
3 Sparrow, Ellie. Sparrows' Nest.
4 Hartley, Craig. Press Release, The Fitzwilliam Museum

Images

1 Plan for Rome. mdhistory.net
2 Pope Sixtus V systems of roads. www.studyblue.com
3 Piazza del Popolo. Courses.cit.cornell.edu
4 Stourhead Gardens. National Geographic
5 Groody Bridge. www.alltravels.com
6 12 Short Walks. Thisistomorrow.info
7 Chaos and Order. www.heldermann-verlag
8 Groody Valley Flooded. aerialphoto.ie
9 Jinhua City project. www.turenscape.com
BIBLIOGRAPHY:


At my final presentation in the School of Architecture. 21.5.15